epigenomics

Prospectus

for the public offering
in the Federal Republic of Germany

of

non-interest-bearing subordinated mandatory convertible bearer bonds in the aggregate principal amount of EUR 16,500,000.00 consisting of 165,000 notes with a nominal amount of EUR 100.00 each

– ISIN: DE000A3E5UB2 / WKN: A3E5UB –

as well as

Prospectus

for the admission to trading to the regulated market segment (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) with simultaneous admission to the sub-segment thereof with additional post-admission obligations (Prime Standard)

of

up to 15,000,000 ordinary registered shares with no-par value (*Stückaktien*) from the Company's Conditional Capital XIV, each such share with a notional value of EUR 1.00 in the share capital

– ISIN: DE000A3H2184 / WKN: A3H218 / Trading Symbol: ECX –

each of

Epigenomics AG
Berlin, Germany

The validity of the prospectuses contained in this document (together, the "**Prospectus**") will expire contemporaneously upon the later of the following events: (i) the closing of the offer period concerning the subordinated mandatory convertible bonds, which is expected to occur on or about September 10, 2021 or (ii) with the deliverability in advance (*vorfristige Lieferbarkeit*) of the abovementioned shares (corresponding to the commencement of trading), which is expected to occur on or about September 17, 2021. The obligation to supplement the Prospectus in the event of significant new factors, material mistakes or material inaccuracies does not apply when the Prospectus is no longer valid.

The date of the Prospectus is August 24, 2021.

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I. SUMMARY OF THE PROSPECTUS

A. Introduction and Warnings

The two prospectuses contained in this document (together, the "**Prospectus**") relate to (i) the public offering in the Federal Republic of Germany ("**Germany**") by Epigenomics AG (the "**Company**" or "**Epigenomics**" and, together with its consolidated subsidiary, the "**Epigenomics Group**", the "**Group**" or "**we**", "**our**" and "**us**") of non-interest-bearing subordinated mandatory convertible bearer bonds in the aggregate principal amount of EUR 16,500,000.00 consisting of 165,000 notes with a nominal amount of EUR 100.00 each (each a "**New Bond**" and collectively, the "**New Bonds**") (the "**Offering**"); and (ii) the admission to trading on the regulated market (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) with the simultaneous admission to the sub-segment thereof with additional post-admission obligations (Prime Standard) of up to 15,000,000 ordinary registered shares with no-par value (*Stückaktien*) of the Company, each such share representing a notional amount of the issued share capital of EUR 1.00 of the Company (the "**New Shares**") (the "**Listing**"), which corresponds to the maximum amount of shares resulting from the conversion of the New Bonds in full (subject to any anti-dilution adjustments).

The International Securities Identification Number ("**ISIN**") of the New Bonds is DE000A3E5UB2 and the ISIN of the New Shares is DE000A3H2184. Epigenomics can be contacted at its business address: Geneststraße 5, 10829 Berlin, Germany, by telephone: +49 30 24345 0, or via its website: www.epigenomics.com. The Legal Entity Identifier ("**LEI**") of Epigenomics is 549300X1C4U862NDLN97.

The entities applying for admission of the New Shares to a regulated market are (i) the Company and (ii) mwb fairtrade Wertpapierhandelsbank AG, Rottenbucher Str. 28, 82166 Gräfelfing, Germany, LEI: 391200ENQM9FRDEEWW40 (telephone: +49 89 858520; www.mwbfairtrade.com) (the "**Bank**") acting as listing agent.

The Prospectus is dated August 24, 2021 and has been approved by the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*, "**BaFin**") on August 24, 2021. BaFin can be contacted at Marie-Curie-Str. 24–28, 60439 Frankfurt am Main, Germany, by telephone: +49 228 4108-0, or via its website: www.bafin.de.

The validity of the prospectus will expire contemporaneously upon the later of the following events: (i) the closing of the offer period concerning the New Bonds, which is expected to occur on or about September 10, 2021 or (ii) with the deliverability in advance (*vorfristige Lieferbarkeit*) of the New Shares (corresponding to the commencement of trading), which is expected to occur on or about September 17, 2021. The obligation to supplement the Prospectus in the event of significant new factors, material mistakes or material inaccuracies does not apply when the Prospectus is no longer valid.

NOTHING IN THE PROSPECTUS CONSTITUTES AN OFFER OF THE NEW BONDS OR THE NEW SHARES FOR SALE IN THE UNITED STATES OF AMERICA ("**UNITED STATES**" OR "**U.S.**") OR ANY OTHER JURISDICTION WHERE IT IS UNLAWFUL TO DO SO. THE NEW BONDS AND THE NEW SHARES HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**"), OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND THE SECURITIES MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES, EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE OR LOCAL SECURITIES LAWS.

This summary should be read as an introduction to the Prospectus. Any decision to invest in the New Bonds or the New Shares should be based on consideration of the Prospectus as a whole by the investor. Investors could lose all or part of their invested capital. Where a claim relating to the information contained in the Prospectus is brought before a court, the plaintiff investor might, under national law, have to bear the costs of translating the Prospectus before the legal proceedings are initiated. Civil liability attaches only to those persons who have tabled the summary including any translation thereof, but only where the summary is misleading, inaccurate or inconsistent, when read together with the other parts of the Prospectus, or where it does not provide, when read together with the other parts of the Prospectus, key information in order to aid investors when considering whether to invest in the New Bonds or the New Shares.

B. Key Information on the Issuer

(i) Who is the issuer of the securities?

Epigenomics is incorporated as a stock corporation (*Aktiengesellschaft*) under the laws of Germany. The Company's domicile is Berlin, Germany, and it is registered with the commercial register of the local court (*Amtsgericht*) Charlottenburg, Germany, under HRB 75861. The Company can be contacted at its business address: Geneststraße 5, 10829 Berlin, Germany, by telephone: +49 30 24345 0, or via its website: www.epigenomics.com. Epigenomics' LEI is 549300X1C4U862NDLN97.

a. Principal activities

We are a commercial-stage molecular diagnostics company focused on patient-friendly, blood-based in vitro diagnostic tests for the screening (*i.e.*, preventive medical examination) and diagnosis of cancer. We develop cancer diagnostic tests, mainly in the colorectal and liver cancer fields.

Our key product, Epi proColon, is, to our knowledge, the first and currently only blood-based screening product for the early detection of colorectal cancer approved by the U.S. Food and Drug Administration. We are currently focused on the

commercialization of Epi proColon in the United States. In particular, we continue working on achieving reimbursement coverage by healthcare payors for the test, specifically by Medicare, a U.S. national health insurance program, even though Medicare coverage for Epi proColon was denied in January 2021.

In addition to the U.S. version of Epi proColon, we market a slightly modified version of the product under the name Epi proColon 2.0 CE directly or through distributors in countries with established screening policies, including select European and Southeast Asian markets. Currently, we are focusing on the development of an improved version of the test, called Epi proColon Next-Gen, which will take at least a few years before becoming commercially exploitable (if ever), but which we believe is showing promising early results. Furthermore, based on promising results from clinical studies, we plan to take the next steps towards marketing a blood-based screening test, the HCCBloodTest, for the identification of liver cancer in patients suffering from cirrhosis.

b. Major shareholders

The Company has no controlling shareholder. The following table gives an overview of the natural persons and legal entities with notifiable holdings in the Company above the respective initial notification thresholds, as notified to the Company, recalculated on the basis of the absolute number of voting rights as of the date of the Prospectus:

	Voting Rights in %[1]		
Ultimate Controlling Person	**Shares[2]**	**Instruments**	**Total**
Wilhelm K. T. Zours[3]	23.93%	—	23.93%
Markus Pfitzke[4]	9.65%	—	9.65%
Morgan Stanley[5]	4.78%	0.00%	4.78%
Roberto Mignone[6]	4.65%	—	4.65%
Jacob Gottlieb[7]	2.51%	—	2.51%

1 Percentages have been calculated throughout (including for instruments and total) on the basis of the absolute number of voting rights given in the respective voting rights notification divided by 12,232,303 shares outstanding as of the date of the Prospectus and, hence, may differ from the percentages shown in the respective voting rights notification. Because the Company has implemented several capital measures in recent times, to the extent that the latest voting rights notification of the respective shareholder was published prior to any such capital measures, the recalculation may have resulted in a calculatory dilution of the shown percentage of voting rights. However, if and to the extent that the respective shareholder has participated in the respective capital measure, his voting rights may be higher than shown in the table above.

2 Based on the respective voting rights notifications, all listed voting rights attached to shares are indirect voting rights pursuant to Section 34 German Securities Trading Act (Wertpapierhandelsgesetz).

3 Based on a voting rights notification published July 22, 2021; including attributed shares held by Heidelberger Beteiligungsholding AG (7.46%), which is an indirect subsidiary of Deutsche Balaton Aktiengesellschaft which itself held 11.10%.

4 Based on a voting rights notification published June 25, 2021.

5 Based on a voting rights notification published June 16, 2021; including attributed voting rights held by Morgan Stanley & Co. LLC (4.65%).

6 Based on a voting rights notification published May 27, 2021; including attributed voting rights held by Bridger Management LLC (4.65%).

7 Based on a voting rights notification published April 21, 2020; including attributed voting rights held by Altium Growth Fund, LP (2.51%) and Altium Capital Management, LP (2.51%).

c. Key managing directors

The Company's executive board (*Vorstand*) consists of two members: Gregory Hamilton is the chief executive officer (CEO) and Albert Weber is the executive vice president finance.

d. Statutory auditors

For the financial years ended December 31, 2020, 2019 and 2018, Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Cecilienallee 6-7, 40474 Düsseldorf, Germany, branch office Nymphenburger Straße 3b, 80335 Munich, Germany ("**Baker Tilly**") was appointed as auditor of the Company.

(ii) What is the key financial information regarding the Issuer?

The unaudited condensed consolidated interim financial statements of the Company as of and for the six-month period ended June 30, 2021 (the "**Unaudited Consolidated Interim Financial Statements**") were prepared by the Company in accordance with the International Financial Reporting Standards as adopted by the European Union ("**IFRS**") on interim financial reporting (IAS 34). The audited consolidated financial statements of the Company as of and for the financial years ended December 31, 2020, 2019 and 2018 (together the "**Audited Consolidated Financial Statements**") were prepared by the Company in accordance with IFRS and the additional requirements of German commercial law pursuant to Section 315a German Commercial Code (*Handelsgesetzbuch*). The audits of the Audited Consolidated Financial Statements were conducted in accordance with Section 317 German Commercial Code (*Handelsgesetzbuch*) and German Generally Accepted Standards for Financial Statements Audits, which are promulgated by the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer*), by Baker Tilly.

In the summary of the Prospectus, where financial information for the Group is labeled "audited", this information was taken from the Audited Consolidated Financial Statements. The label "unaudited" is used to indicate financial information that was taken from Unaudited Consolidated Interim Financial Statements, or the Company's accounting records or internal management reporting systems, or which is based on calculations of these figures.

a. Key financial information from the consolidated income statements

	Six-Month Period ended June 30,		Financial Year ended December 31,		
	2021	2020	2020	2019	2018
(EUR thousand)	**(unaudited)**		**(audited)**		
Revenue	223	322	842	1,125	1,533
Year-on-year revenue growth (in %)	(30.7)	—	(25.2)	(26.6)	—
Operating result/earnings before interest and taxes (EBIT)[1]	(3,485)	(6,321)	(11,627)	(14,673)	(12,895)
Net loss for the period	(3,528)	(6,354)	(11,686)	(17,020)	(12,692)
Earnings per share (basic and diluted, in EUR)[2]	(0.41)	(1.21)	(2.02)	(0.46)	(0.47)

[1] Reflects "Operating result/earnings before interest and taxes (EBIT)" as shown in our consolidated statement of comprehensive income in our Audited Consolidated Financial Statements and is an alternative performance measures within the meaning of the European Securities and Markets Authority Guidelines on alternative performance measures of October 5, 2015. It is defined as total comprehensive income for the year before other comprehensive income for the year, taxes on income, other financial result, interest expenses and interest income. The following table shows a reconciliation to the line item "Total comprehensive income for the year":

	Six-Month Period ended June 30,		Financial Year ended December 31,		
	2021	2020	2020	2019	2018
(EUR thousand)	**(unaudited)**		**(audited)**		
Total comprehensive income for the period	(4,118)	(6,403)	(10,077)	(16,939)	(13,265)
– Other comprehensive income for the period	(590)	(49)	1,609	81	(573)
– Taxes on income	(7)	(14)	(23)	(2,454)	738
– Other financial result	(16)	(1)	(2)	(2)	(2)
– Interest expenses	(23)	(30)	(55)	(63)	(550)
– Interest income	3	12	21	172	17
Operating result/earnings before interest and taxes (EBIT)	**(3,485)**	**(6,321)**	**(11,627)**	**(14,673)**	**(12,895)**

[2] Earnings per share (basic) are calculated by dividing the net loss for the period by the weighted average number of shares issued. The outstanding stock options granted by the Company are antidilutive in accordance with IAS 33.41 and 33.43 *Earnings per Share*. Therefore, the earnings per share (diluted) equal the earnings per share (basic). The number of shares issued as of June 30, 2021 amounted to 11,823,227 (December 31, 2020: 5,891,230; June 30, 2020: 43,527,692; December 31, 2019: 43,527,692; December 31, 2018: 36,021,540). As of the date of the Prospectus, the number of shares issued amounts to 12,232,303.

b. Key financial information from the consolidated statements of financial position

	As of June 30,	As of December 31,		
	2021	2020	2019	2018
(EUR thousand)	**(unaudited)**	**(audited)**		
Total assets	9,690	6,797	13,989	21,827
Total equity	6,361	3,864	9,629	18,613

c. Key financial information from the consolidated statements of cash flows

	Six-Month Period ended June 30,		Financial Year ended December 31,		
	2021	2020	2020	2019	2018
(EUR thousand)	**(unaudited)**		**(audited)**		
Cash flow from operating activities	(4,223)	(5,516)	(9,571)	(13,506)	(10,351)
Cash flow from investing activities	993	6	3	47	724
Cash flow from financing activities	6,514	3,149	2,982	7,120	13,274

(iii) What are the key risks that are specific to the issuer?

An investment in the New Bonds or the New Shares is subject to a number of risks, some of which are presented in this section and under section "C.*(iii) What are the key risks that are specific to the securities?*" of this summary. The occurrence of any of the following risks could have a material adverse or adverse effect on the Group's business, results of operations, financial position, and cash flows.

The following risks are key risks specific to the Company:

- We have a history of losses, expect to incur increasing costs in the future in connection with the planned commercialization of Epi proColon, and may never achieve or maintain profitability.
- Medicare coverage (a U.S. national health insurance program) for our key product, Epi proColon, was denied in January 2021, resulting in significant delays in our efforts to commercialize the product. In light of these events, and our constant need to raise additional funds, we are currently exploring potential strategic options, including, but not limited to, a third party potentially submitting a takeover offer to our shareholders, the sale of assets, a strategic partnership or joint venture, or developing alternative financing sources which may include attracting new (equity) investors. This structured process is costly, time-consuming and may fail at any point. Even if we were to successfully conclude a potential transaction as part of this structured process, it could have a negative impact on us and/or our shareholders.
- Our success in commercializing Epi proColon and other (future) products depends in particular on reimbursement from government and health administration authorities, such as Medicare, or other third-party payors like private health insurers. As Medicare coverage for Epi proColon, our most important product, was recently denied, it is highly uncertain if and when such success will be achieved.
- COVID-19 has, and continues to, negatively affect segments of the global economy and has similarly negatively affected our operations, including, among other things, interrupting our supply chain, clinical trials and commercialization activities, as well as, delaying approvals and reimbursement decisions and may continue to do so in the foreseeable future.
- Our commercial progress depends primarily on the sales of our Epi proColon test and we will need to generate significant revenue from this test to be profitable in the future. As a result of the recent denial of reimbursement coverage for Medicare patients, this may not be possible.
- The success of Epi proColon depends on its market acceptance by physicians, payors, Laboratory Customers, patients and others in the medical community. Our failure to gain such market acceptance may have an adverse effect on, among other things, our business and results of operations.
- Because cancer screening (*i.e.*, preventive medical examination) is voluntary, acceptance of our products depends on the willingness of patients to be screened, which is outside of our control.
- Our success depends on obtaining, maintaining and enforcing patents and other intellectual property rights relating to our technologies, products and product candidates. If we are unable to protect such intellectual property rights, we may not be able to compete effectively. For example, we could lose our ability to prevent others from utilizing our technologies or commercializing products similar or identical to ours without payment to us.
- Changes in patent laws and their interpretation, in particular in the United States, make it difficult to predict how patents will be issued or enforced in our industry, as well as making it similarly difficult to ensure protection of our intellectual property rights, thereby hindering our ability to compete effectively.
- Our products, including our key product Epi proColon, as well as our product candidates and the Group are subject to continuing regulatory review and regulatory requirements such as post-approval studies which if not effectively approved or conducted, respectively, could result in us losing approvals, and thereby, our ability to market such products.
- Due to our significant consumption of cash, we regularly require new capital to finance our business operations, the current capital measure will not be sufficient to reach the cash flow break-even point even in a positive scenario and if we cannot raise sufficient capital when needed, we may have to curtail or cease operations and/or file for insolvency proceedings.
- As we need additional funds on an ongoing basis to finance our operations, we are dependent on the condition and the development of the capital markets. Hence, financial market or economic crises and other developments may compromise our financing options and increase the costs of financing jeopardizing our future existence.

C. Key Information on the Securities

(i) What are the main features of the securities?

The New Bonds are subordinated mandatory convertible bearer bonds with a nominal amount of EUR 100.00 each. Their ISIN is DE000A3E5UB2. The New Bonds are non-interest-bearing (zero coupon) and have a term until September 29, 2027. In addition to conversion rights for the holders of New Bonds, they also include a conversion obligation for all outstanding New Bonds not yet converted at maturity. There is generally no repayment of capital. Subject to any anti-dilution adjustments, the conversion price per share is EUR 1.10. Pursuant to the terms and conditions of the New Bonds, the liabilities of the Company from the New Bonds constitute subordinated and unsecured liabilities subordinated to all liabilities pursuant to Section 39 para. 1 sentence 1 no. 5 German Insolvency Code (*Insolvenzordnung*) and to all other present and future liabilities of the Company which, under their terms or on the basis of mandatory law, have the same ranking as liabilities pursuant to Section 39 para. 1 sentence 1 no. 5 German Insolvency Code (*Insolvenzordnung*) or take precedence over such liabilities, including liabilities ranked in accordance with Section 38 and Section 39 para. 1 sentence 1 no. 1 to no. 4 German Insolvency Code (*Insolvenzordnung*). The obligations of the Company under the New Bonds have equal priority among themselves.

The New Shares are new, ordinary registered shares with no-par value (*Stückaktien*), each such share representing a notional amount of the Company's issued share capital of EUR 1.00. Their ISIN is DE000A3H2184. They result from the Company's conditional capital XIV resolved by the general shareholders' meeting of the Company on June 12, 2020, as amended by the extraordinary general shareholders' meeting of the Company on November 27, 2020. Once issued, the New Shares will have full

dividend rights as of the beginning of the financial year of their respective issuance and for subsequent financial years, or in the event that New Shares are issued prior to the general shareholders' meeting of the Company resolving on the appropriation of the net profits of the preceding financial year, the New Shares will have full dividend rights as from the beginning of the financial year preceding their respective issuance and for subsequent financial years. All shares of the Company, including the New Shares offered, are shares of the same class. Each of the shares of the Company, including each of the New Shares, confers one vote at the general shareholders' meeting of the Company. The voting rights are not restricted. Voting rights are the same for all of the Company's shareholders. The transferability of the shares of the Company is restricted neither by law nor by the articles of association of the Company, other than certain limitations for residents of certain jurisdictions, including in particular the United States. The New Shares are, upon the respective issuance of each of the New Shares, entitled to a share of any liquidation proceeds or insolvency surpluses at the ratio of their notional share in the share capital. The Company's ability and intention to pay dividends in the future will depend on its financial position, results of operations, capital requirements, investment alternatives and other factors. The Company did not pay any dividends in the past, can provide no assurance that it will pay dividends in future years, and at this time does not intend to pay dividends in the future.

(ii) Where will the securities be traded?

The Company does not intend to admit the New Bonds to a regulated market, or to include the New Bonds in trading on an unregulated market. Subject to this, the New Shares will be traded on the regulated market segment (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and, simultaneously, on the sub-segment thereof with additional post-admission obligations (Prime Standard), in which the shares of the Company are already traded.

(iii) What are the key risks that are specific to the securities?

The following risks are key risks specific to the New Bonds and/or New Shares:

- Particularly due to our relatively low market capitalization, the market price and trading volume of the Company's shares could fluctuate significantly and shareholders could lose all or part of their investment. As the New Bonds will convert into shares of the Company in 2027 at the latest, holders of the New Bonds are also exposed to the market price risk with respect to the Company's shares and any adverse development regarding the shares will eventually also adversely affect the holders of the New Bonds.
- Current and/or future offerings of debt or equity securities by us could material adversely affect the market price of the Company's securities and could substantially dilute our shareholders' interests, as well as voting rights, in the Company.
- The New Bonds are subordinated to all senior debt and the New Bond holders will have no shareholder rights prior to conversion, as a result of which the bondholders may lose their investment and have, in particular, less influence compared to shareholders.

D. Key Information on the Offering of Securities to the Public and Admission to Trading on a Regulated Market

(i) Under which conditions and timetable can I invest in these securities?

a. Scope of the Offering and the Admission to Trading

The Offering relates to the public offering in Germany by the Company of the New Bonds, *i.e.*, subordinated mandatory convertible bearer bonds in the aggregate principal amount of EUR 16,500,000.00 consisting of 165,000 notes with a nominal amount of EUR 100.00 each (ISIN: DE000A3E5UB2) by way of a subscription offering to existing shareholders of the Company (including a possibility to submit oversubscription orders). The Bank acts as subscription agent (*Bezugsstelle*).

The Company and the Bank together applied for the admission to trading of the New Shares on the regulated market segment (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) on August 10, 2021. Once the New Shares are deliverable in advance (*vorfristig lieferbar*), which corresponds to the commencement of trading of the New Shares on the regulated market segment (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and is expected to occur on or about September 17, 2021, the New Shares can be bought and sold on this market.

b. Anticipated timetable

The anticipated timetable, which remains subject to changes, for the Offering and Listing is as follows:

August 24, 2021	• Approval of the Prospectus by BaFin and publication of the approved Prospectus on the Company's website.
August 26, 2021	• Publication of the subscription offer relating to the New Bonds in the German Federal Gazette (*Bundesanzeiger*).
August 27, 2021	• Commencement of the subscription period for the New Bonds. • Trading of the shares of the Company "ex subscription right". • Commencement of trading in subscription rights for the New Bonds.
September 8, 2021 12:00 noon (CEST)	• End of trading in subscription rights for the New Bonds.
September 10, 2021	• End of the subscription period for the New Bonds.

September 13, 2021	• Announcement on the final results of the Offering on Company's website.
September 14, 2021	• Book-entry delivery of the New Bonds.
September 15, 2021	• Expected admission decision by the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) regarding the New Shares.
September 17, 2021	• Deliverability in advance (*vorfristige Lieferbarkeit*) of the New Shares, which corresponds to the commencement of trading of the New Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*).

c. Terms of the Offering

The New Bonds will be offered to the existing shareholders of the Company against contributions in cash in the amount of 100% of the respective nominal amount, corresponding to EUR 100.00 per New Bond, at a subscription ratio of 74 : 1 or 74 : EUR 100.00, respectively. In order to permit an even subscription ratio, an existing shareholder has waived the subscription rights arising from 22,303 existing shares of the Company. The shareholders will be granted their statutory subscription right to the New Bonds as an indirect subscription right (*mittelbares Bezugsrecht*) in such a way that the Bank in its capacity as subscription agent is admitted to subscribe for and take up the New Bonds with the obligation to allocate them to the shareholders of the Company. The subscription rights will be freely transferable outside the United States in compliance with Regulation S under the Securities Act ("**Regulation S**"), and are expected to be tradable in the period from August 27, 2021 (inclusive) to September 8, 2021, 12:00 noon (CEST), on the unregulated market (*Freiverkehr*) of the Hamburg Stock Exchange (*Hanseatische Wertpapierbörse Hamburg*). They are scheduled to be booked to the shareholders' custodian banks by the collective securities depositary Clearstream Banking Aktiengesellschaft, Mergenthalerallee 61, 65760 Eschborn, Germany, on or about September 14, 2021. The determination of the subscription rights to which the shareholders are entitled in each case shall be based on their respective holdings of shares at the end of August 30, 2021 (record date).

Subscription rights are expected to be exercisable in the period from August 27, 2021 to September 10, 2021 (in each case inclusive) through the respective bondholder's custodian bank at the Bank during regular business hours. Holders of subscription rights who wish to exercise their subscription rights must also pay the subscription price per New Bond through their custodian bank to the Bank in its capacity as subscription agent when exercising the subscription right, but no later than on the last day of the subscription period. In addition, each shareholder or investor who exercises his or her subscription rights in its entirety (other than any residual subscription rights that would lead to fractional amounts of New Bonds) may submit binding purchase orders for further New Bonds at the subscription price for up to three times the number of New Bonds for which he or she exercised his or her subscription right ("**Oversubscription**"). To the extent it is not possible to accommodate all such purchase orders which are part of the Oversubscription due to high demand in connection with the Oversubscription, New Bonds will be allocated on a pro rata basis. With regard to any resulting fractions, the shareholders shall have no claim to delivery of New Bonds or cash settlement.

Subscription rights held by shareholders who are resident of the United States may only be exercised upon confirmation of the following warranties: (a) it understands that the subscription rights, the New Bonds and the New Shares have not been and will not be registered under the Securities Act or any other applicable U.S. state securities laws and are being offered and issued or sold in a transaction not involving a public offering in the United States, that is exempt from the registration requirements of the Securities Act; (b) it is acquiring the subscription rights, the New Bonds and the New Shares, as the case may be, for investment purposes and not with a view to any distribution (within the meaning of the U.S. federal securities laws) of the securities; (c) it understands that the subscription rights, the New Bonds and the New Shares are restricted securities within the meaning of Rule 144(a)(3) of the Securities Act; and (d) it will not transfer any of the subscription rights, the New Bonds and the New Shares except in compliance with Regulation S or pursuant to an effective registration statement under the Securities Act.

The Company and the Bank are entitled to terminate the Offering at any time, even after expiry of the subscription period and until delivery of the New Bonds, if (i) the issue of the New Bonds is inadmissible or impossible for legal reasons or (ii) the executive board and the supervisory board of the Company come to the conclusion that the implementation of the Offering is no longer in the Company's interest.

d. Dilution

As holders of the New Bonds exercise their conversion rights or these are mandatorily triggered, the shareholding percentage of other shareholders in the Company not holding any New Bonds will decline and their voting rights will be diluted through the issuance of New Shares. Under the New Bonds a total of up to 15,000,000 New Shares (subject to adjustments due to future capital measures) will be issued as conversion rights are exercised or mandatorily triggered, by no later than September 30, 2027. Based on a number of 12,232,303 outstanding shares of the Company on the date of the Prospectus, this will ultimately lead to a dilution of 55.1% for shareholders not holding any New Bonds.

In addition, as of the date of the Prospectus, there are outstanding mandatory convertible bonds issued in February 2021 which, upon their conversion, will further dilute the shareholding percentage and voting rights of shareholders in the Company not holding the respective bonds.

Assuming the issuance and the full conversion of all of the New Bonds, after deduction of the estimated expenses for the Offering and Listing, the net tangible book value (corresponding to total assets less intangible assets less non-current liabilities less current liabilities) of the Company as of June 30, 2021 would increase by EUR 0.27 or 50.2% per Share for the Company's existing shareholders and entails an immediate decrease in net tangible book value per share for the former holders of the New Bonds of EUR 0.30 or 27.3% per share.

e. Expenses

The costs of the Company related to the Offering and Listing are expected to total approximately EUR 1.35 million, all of which will be borne by the Company. These costs mainly comprise costs for the preparation of the Prospectus, fees to be paid or paid, respectively, to the Bank and Deutsche Balaton Aktiengesellschaft, Heidelberg, Germany ("**Deutsche Balaton**"), as well as admission fees and other advisory costs.

Neither the Company nor the Bank in its capacity as subscription agent will charge expenses to investors. However, investors will themselves be required to bear the fees charged by their brokers or other financial institutions for the purchase and holding of securities.

(ii) Who is the offeror and/or person asking for admission to trading?

The Offering will be made by the Company. The Company and mwb fairtrade Wertpapierhandelsbank AG, a stock corporation with its registered seat at Rottenbucher Str. 28, 82166 Gräfelfing, incorporated in and operating under the laws of Germany, acting as listing agent, together applied for the admission to trading of the New Shares.

(iii) Why is this prospectus being produced?

a. Reasons for the Offering and Listing

The Company intends to obtain additional funding through the Offering. The Company, together with the Bank, is pursuing the Listing in order to be able to deliver New Shares to the holders of the New Bonds upon conversion which are admitted to trading on the regulated market segment (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and, simultaneously, to the sub-segment thereof with additional post-admission obligations (Prime Standard).

b. Use and estimated net amount of proceeds

The Company will receive proceeds only from the Offering but not from the Listing. Assuming full placement of the New Bonds, such proceeds are estimated to amount to approximately EUR 15.15 million after deduction of all costs for the Listing and Offering (net proceeds).

The Company intends to use the net proceeds from the Offering primarily (approximately EUR 11.0 million) to finance the development of the product candidate and blood-based colorectal cancer screening test, Epi proColon Next-Gen, by, among other things, initiating a clinical study in the United States. The remaining proceeds from the Offering, which are expected to amount to approximately EUR 4.15 million, are intended to be used for general corporate purposes, in particular pursuing the commercialization of the blood-based colorectal cancer screening test Epi proColon.

c. Most material conflicts of interest pertaining to the Offering and Listing

On July 15, 2021, the Company and the Bank entered into an engagement agreement regarding the handling of the execution of the Offering and Listing, in which the Bank agreed to, among other things and subject to certain conditions, to subscribe for the New Bonds to the extent that shareholders have subscribed for the New Bonds by entering into a subscription agreement with the Company and to offer such New Bonds in a public offering to the Company's shareholders in connection with an indirect subscription right (*mittelbares Bezugsrecht*) and, together with the Company, to apply for admission of the New Shares to trading on the regulated market segment (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and, simultaneously, on the sub-segment thereof with additional post-admission obligations (Prime Standard). Under these agreements, the Bank will receive a fixed commission from the Company. The Company therefore assumes that the Bank has a financial interest in the successful completion of the transaction, which constitutes a potential conflict of interest.

In addition, on June 11, 2021, the Company and its shareholder, Deutsche Balaton (an entity ultimately controlled by Wilhelm K. T. Zours), entered into an subscription and backstop agreement as subsequently amended on August 20, 2021, in which Deutsche Balaton agreed to, among other things and subject to certain conditions, purchase at the subscription price all New Bonds still unallocated by the end of the subscription period, thereby, potentially increasing its shareholdings and voting rights in the Company disproportionately, as well as to participate in future capital measures of the Company. In addition, Deutsche Balaton and its subsidiary ABC Beteiligungen AG have (i) committed, for a period of six months following the declaration of the deliverability in advance (*vorfristige Lieferbarkeit*) of the New Shares, to a lock-up commitment *vis-à-vis* the Bank regarding (a) in case of Deutsche Balaton, any New Bonds acquired under the abovementioned subscription and backstop agreement and any shares of the Company resulting from the conversion of such New Bonds, as well as at least additional 950,395 shares of the Company, and (b) in case of ABC Beteiligungen AG, at least 233,161 shares of the Company, and (ii) each waived any liability of the Bank that might arise from the Prospectus or the application for admission of the New Shares to a regulated market. The Company therefore assumes that Deutsche Balaton and ABC Beteiligungen AG have a financial and strategic interest in the successful completion of the transaction, which constitutes a potential conflict of interest.

In addition, all members of our executive board and our supervisory board directly or indirectly hold shares, convertible bonds and/or stock option rights of the Company, and may acquire New Bonds in the Offering, thereby increasing their holdings in the Company in the future. As a result, they may, separately from their positions in the respective governing body, have financial and economic interests in the development of the Company's share price or the Offering or the Listing, which constitutes a potential conflict of interest.

II. ZUSAMMENFASSUNG DES PROSPEKTS
(GERMAN TRANSLATION OF SUMMARY OF PROSPECTUS)

A. Einleitung und Warnhinweise

Die in diesem Dokument enthaltenen zwei Prospekte (gemeinsam, der „**Prospekt**“) beziehen sich auf (i) das öffentliche Angebot in der Bundesrepublik Deutschland („**Deutschland**“) der Epigenomics AG (die „**Gesellschaft**" oder „**Epigenomics**“ und, gemeinsam mit ihren konsolidierten Tochtergesellschaften, die „**Epigenomics Gruppe**“, die „**Gruppe**" oder „**wir**", „**unsere**“ und „**uns**“), von unverzinslichen nachrangigen auf den Inhaber lautende Pflichtwandelanleihen im Gesamtnennbetrag von EUR 16.500.000,00, bestehend aus 165.000 Teilschuldverschreibungen mit einem Nennbetrag von je EUR 100,00 (jede eine „**Neue Anleihe**“ und gemeinsam die „**Neuen Anleihen**“) (das „**Angebot**“); und (ii) die Zulassung zum Handel am regulierten Markt an der Frankfurter Wertpapierbörse bei gleichzeitiger Zulassung im Teilbereich des regulierten Marktes mit weiteren Zulassungsfolgepflichten (*Prime Standard*) von bis zu 15.000.000 neuen, auf den Namen lautenden Stückaktien ohne Nennbetrag der Gesellschaft, jeweils mit einem anteiligen Betrag des Grundkapitals der Gesellschaft von EUR 1,00 (die „**Neuen Aktien**“) (die „**Zulassung**“), was der maximalen Anzahl von aus einer vollständigen Wandlung der Neuen Anleihen resultierenden Aktien entspricht (vorbehaltlich etwaiger Verwässerungsschutzanpassungen).

Die Internationale Wertpapierkennnummer (*International Securities Identification Number*, „**ISIN**“) der Neuen Anleihen ist DE000A3E5UB2 und die ISIN der Neuen Aktien ist DE000A3H2184. Die Epigenomics AG ist unter ihrer Geschäftsadresse Geneststraße 5, 10829 Berlin, Deutschland, telefonisch unter +49 30 24345-0 oder über ihre Webseite www.epigenomics.com erreichbar. Die Rechtsträgerkennung (*Legal Entity Identifier, „**LEI**“*) der Epigenomics AG ist 549300X1C4U862NDLN97.

Die Einrichtungen, die die Zulassung der Neuen Aktien zum regulierten Markt beantragen, sind (i) die Gesellschaft und (ii) die mwb fairtrade Wertpapierhandelsbank AG, Rottenbucher Str. 28, 82166 Gräfelfing, Deutschland, LEI: 391200ENQM9FRDEEWW40 (Telefon: +49 89 858520, www.mwbfairtrade.com) (die „**Bank**“) handelnd als Zulassungsantragsstellerin.

Der Prospekt vom 24. August 2021 wurde von der Bundesanstalt für Finanzdienstleistungsaufsicht („**BaFin**“) am 24. August 2021 gebilligt. Die BaFin ist erreichbar unter Marie-Curie-Str. 24–28, 60439 Frankfurt am Main, Deutschland, telefonisch unter +49 228 4108-0 oder über ihre Webseite www.bafin.de.

Die Gültigkeit des Prospekts endet zeitgleich mit dem späteren der folgenden Ereignisse: (i) mit dem Ende der Angebotsfrist für die Neuen Anleihen, das voraussichtlich am oder um den 10. September 2021 eintreten wird, oder (ii) mit der vorfristigen Lieferbarkeit der Neuen Aktien (entspricht der Aufnahme des Handels), die voraussichtlich am oder um den 17. September 2021 eintreten wird. Die Verpflichtung zur Ergänzung des Prospekts im Falle von wichtigen neuen Umständen, wesentlichen Unrichtigkeiten oder wesentlichen Ungenauigkeiten gilt nicht, wenn der Prospekt nicht mehr gültig ist.

*NICHTS IN DIESEM PROSPEKT STELLT EIN ANGEBOT VON DEN NEUEN ANLEIHEN ODER DEN NEUEN AKTIEN ZUM VERKAUF IN DEN VEREINIGTEN STAATEN VON AMERIKA („**VEREINIGTE STAATEN**“ ODER „**USA**“) ODER EINER ANDEREN RECHTSORDNUNG DAR, IN DER DIES UNGESETZLICH IST. DIE NEUEN ANLEIHEN UND DIE NEUEN AKTIEN WURDEN UND WERDEN NICHT GEMÄSS DEM US-AMERIKANISCHEN WERTPAPIERGESETZ VON 1933 IN DER JEWEILS GÜLTIGEN FASSUNG (DAS „**US-WERTPAPIERGESETZ**“) ODER DEN WERTPAPIERGESETZEN EINES BUNDESSTAATES DER VEREINIGTEN STAATEN REGISTRIERT UND DÜRFEN IN DEN VEREINIGTEN STAATEN NICHT ANGEBOTEN ODER VERKAUFT WERDEN, ES SEI DENN, ES LIEGT EINE AUSNAHME VON DEN REGISTRIERUNGSANFORDERUNGEN DES US-WERTPAPIERGESETZES UND DER GELTENDEN BUNDESSTAATLICHEN ODER LOKALEN WERTPAPIERGESETZE VOR ODER ES HANDELT SICH UM EINE TRANSAKTION, DIE DIESEN ANFORDERUNGEN NICHT UNTERLIEGT.*

Diese Zusammenfassung sollte als Einleitung zu diesem Prospekt verstanden werden. Bei jeder Entscheidung, in die Neuen Anleihen oder Neuen Aktien zu investieren, sollte sich der Anleger auf den Prospekt als Ganzes stützen. Anleger können ihr gesamtes angelegtes Kapital oder einen Teil davon verlieren. Für den Fall, dass vor einem Gericht Ansprüche aufgrund der in dem Prospekt enthaltenen Informationen geltend gemacht werden, könnte der als Kläger auftretende Anleger nach nationalem Recht die Kosten für die Übersetzung des Prospekts vor Prozessbeginn zu tragen haben. Zivilrechtlich haften nur diejenigen Personen, die die Zusammenfassung samt etwaiger Übersetzungen vorgelegt und übermittelt haben, und dies auch nur für den Fall, dass die Zusammenfassung, wenn sie zusammen mit den anderen Teilen des Prospekts gelesen wird, irreführend, unrichtig oder widersprüchlich ist oder dass sie, wenn sie zusammen mit den anderen Teilen des Prospekts gelesen wird, nicht die Basisinformationen vermittelt, die in Bezug auf Anlagen in die Neuen Anleihen oder die Neuen Aktien für die Anleger eine Entscheidungshilfe darstellen würden.

B. Basisinformationen über die Emittentin

(i) Wer ist die Emittentin der Wertpapiere?

Epigenomics ist eine Aktiengesellschaft nach deutschem Recht. Die Gesellschaft hat ihren Sitz in Berlin, Deutschland, und ist im Handelsregister des Amtsgerichts Charlottenburg unter HRB 75861 eingetragen. Die Gesellschaft ist unter ihrer Geschäftsadresse Geneststraße 5, 10829 Berlin, Deutschland, telefonisch unter +49 30 24345 0 oder über ihre Webseite www.epigenomics.com erreichbar. Die LEI der Epigenomics AG ist 549300X1C4U862NDLN97.

a. Haupttätigkeiten der Emittentin

Wir sind ein Molekulardiagnostikunternehmen in der kommerziellen Phase, das sich auf patientenfreundliche, blutbasierte In-vitro-Diagnosetests für die Erkennung (d.h. die medizinische Früherkennung) und -diagnose von Krebs konzentriert. Wir entwickeln krebsdiagnostische Tests, vor allem in den Bereichen Darm- und Leberkrebs.

Unser Schlüsselprodukt Epi proColon ist nach unserem Kenntnisstand das erste und derzeit einzige blutbasierte Screening-Produkt zur Früherkennung von Darmkrebs, das von der U.S. Food and Drug Administration zugelassen ist. Derzeit konzentrieren wir uns auf die Vermarktung von Epi proColon in den USA. Insbesondere arbeiten wir daran, eine Erstattungsdeckung für den Test durch die Kostenträger im Gesundheitswesen zu erreichen, insbesondere seitens Medicare, einem nationalen Krankenversicherungsprogramm in den USA, auch wenn die Kostenübernahme für Epi proColon durch Medicare im Januar 2021 versagt wurde.

Zusätzlich zur U.S.-Version von Epi proColon vermarkten wir eine leicht modifizierte Version des Produkts unter dem Namen Epi proColon 2.0 CE direkt oder über Händler in Ländern mit etablierten Screening-Richtlinien, darunter ausgewählte europäische und südostasiatische Märkte. Derzeit konzentrieren wir uns auf die Entwicklung einer verbesserten Version des Tests, genannt Epi proColon Next-Gen, die mindestens ein paar Jahre brauchen wird, bevor sie kommerziell genutzt werden kann (wenn überhaupt), von der wir aber glauben, dass sie vielversprechende erste Ergebnisse zeigt. Darüber hinaus planen wir auf der Grundlage vielversprechender Ergebnisse aus klinischen Studien die nächsten Schritte zur Vermarktung eines blutbasierten Früherkennungstests, HCCBloodTest, zur Identifizierung von Leberkrebs bei Patienten mit Zirrhose.

b. Hauptanteilseigner

Die Gesellschaft hat keinen Mehrheitsaktionär. Die nachstehende Tabelle verschafft einen Überblick über die natürlichen und juristischen Personen mit meldepflichtigen Beteiligungen an der Gesellschaft oberhalb der jeweiligen Erstmitteilungsschwellen, entsprechend den Mitteilungen an die Gesellschaft, neuberechnet auf Basis der absoluten Anzahl an Stimmrechten zum Datum des Prospekts:

	Stimmrechte in %[1]		
Oberste beherrschende Person	**Aktien[2]**	**Instrumente**	**Insgesamt**
Wilhelm K. T. Zours[3]	23,93%	—	23,93%
Markus Pfitzke[4]	9,65%	—	9,65%
Morgan Stanley[5]	4,78%	0,00%	4,78%
Roberto Mignone[6]	4,65%	—	4,65%
Jacob Gottlieb[7]	2,51%	—	2,51%

1 Prozentsätze wurden durchgängig (inklusive "Instrumente" und "Insgesamt") auf Basis der in der jeweiligen Stimmrechtsmitteilung angegebenen absoluten Anzahl an Stimmrechten geteilt durch 12.232.303 ausstehende Aktien zum Datum des Prospektes berechnet und können daher von den in der jeweiligen Stimmrechtsmitteilung angegebenen Prozentsätzen abweichen. Da die Gesellschaft in letzter Zeit mehrere Kapitalmaßnahmen durchgeführt hat, kann die Neuberechnung, soweit die letzte Stimmrechtsmitteilung des jeweiligen Aktionärs vor solchen Kapitalmaßnahmen veröffentlicht wurde, zu einer rechnerischen Verwässerung der gezeigten Stimmrechtsanteil geführt haben. Falls und im Umfang, in dem der jeweilige Aktionär jedoch an der jeweiligen Kapitalmaßnahme teilgenommen hat, kann sein Stimmrechtsanteil höher sein als in der obigen Tabelle dargestellt.

2 Gemäß den jeweiligen Stimmrechtsmitteilungen sind alle aus Aktien resultierenden Stimmrechte indirekte Stimmrechte gemäß § 34 WpHG.

3 Gemäß einer Stimmrechtsmitteilung vom 22. Juli 2021, einschließlich zugerechneter Beteiligungen, die von der Heidelberger Beteiligungsholding AG (7,46%), die mittelbare Tochtergesellschaft der Deutschen Balaton AG (die ihrerseits 11,10% hält) ist, gehalten werden.

4 Gemäß einer Stimmrechtsmitteilung vom 26. Juni 2021.

5 Gemäß einer Stimmrechtsmitteilung vom 16. Juni 2021, einschließlich zugerechneter Beteiligungen, die von Morgan Stanley & Co. LLC (4,65%) gehalten werden.

6 Gemäß einer Stimmrechtsmitteilung vom 27. Mai 2021, einschließlich zugerechneter Beteiligungen, die von Bridger Management LLC (4,65%) gehalten werden.

7 Gemäß einer Stimmrechtsmitteilung vom 21. April 2020, einschließlich zugerechneter Beteiligungen, die von Altium Growth Fund, LP (2,51%) und Altium Capital Management, LP (2,51%) gehalten werden.

c. Hauptgeschäftsführer

Der Vorstand der Gesellschaft besteht aus zwei Mitgliedern: Gregory Hamilton ist der Chief Executive Officer (CEO) und Albert Weber ist der Executive Vice President Finance.

d. Abschlussprüfer

Für die am 31. Dezember 2020, 2019 und 2018 endenden Geschäftsjahre wurde die Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Cecilienallee 6-7, 40474 Düsseldorf, Deutschland, Zweigniederlassung Nymphenburger Straße 3b, 80335 München, Deutschland („**Baker Tilly**") zum Abschlussprüfer der Gesellschaft bestellt.

(ii) Was sind die wesentlichen Finanzinformationen über den Emittenten?

Die ungeprüften verkürzten Konzernzwischenabschlüsse der Gesellschaft zum und für den Sechsmonatszeitraum zum 30. Juni 2021 (die „**Ungeprüften Konzernzwischenabschlüsse**") wurden von der Gesellschaft in Übereinstimmung mit den *International Financial Reporting Standards*, wie sie in der Europäischen Union anzuwenden sind („**IFRS**"), zur Zwischenberichterstattung (IAS 34) erstellt. Die geprüften Konzernabschlüsse der Gesellschaft für die zum 31. Dezember 2020, 2019 und 2018 endenden Geschäftsjahre (zusammen die „**Geprüften Konzernabschlüsse**") wurden von der Gesellschaft in Übereinstimmung mit IFRS, und den zusätzlichen Anforderungen des deutschen Handelsrechts nach § 315a des Handelsgesetzbuches („**HGB**") erstellt. Die Geprüften Konzernabschlüsse wurden von Baker Tilly nach § 317 HGB und den deutschen Grundsätzen ordnungsmäßiger Abschlussprüfung, die vom Institut der Wirtschaftsprüfer herausgegeben werden, geprüft.

Wo die Finanzinformationen der Gruppe in der Zusammenfassung des Prospekts als „geprüft" bezeichnet sind, wurden diese Informationen den Geprüften Konzernabschlüssen entnommen. Die Bezeichnung „ungeprüft" wird verwendet, um Finanzinformationen anzugeben, die aus den Ungeprüften Konzernzwischenabschlüssen, den Buchhaltungsunterlagen oder den internen Management-Berichtssystemen der Gesellschaft stammen oder auf der Grundlage von Berechnungen dieser Zahlen erstellt wurden.

a. Wesentliche Finanzinformationen aus den Konzern-Gewinn- und Verlustrechnungen

	Für den Sechsmonatszeitraum zum 30. Juni		**Für das Geschäftsjahr zum 31. Dezember**		
	2021	**2020**	**2020**	**2019**	**2018**
(EUR Tausend)	**(ungeprüft)**		**(geprüft)**		
Umsatzerlöse	223	322	842	1.125	1.533
Umsatzwachstum im Vergleich zum Vorjahr (in %)	(30,7)	—	(25,2)	(26,6)	—
Betriebsergebnis/Ergebnis vor Zinsen und Steuern (EBIT)[1]	(3.485)	(6.321)	(11.627)	(14.673)	(12.895)
Periodenfehlbetrag	(3.528)	(6.354)	(11.686)	(17.020)	(12.692)
Ergebnis je Aktie (unverwässert und verwässert, in EUR)[2]	(0,41)	(1,21)	(2,02)	(0,46)	(0,47)

[1] Stellt „Ergebnis vor Zinsen und Steuern (EBIT)" dar, wie es in unserer Konzern-Gesamtergebnisrechnung gezeigt wird und ist eine alternative Leistungskennzahl im Sinne der Leitlinien der Europäischen Wertpapier- und Marktaufsichtsbehörde zu alternativen Leistungskennzahlen vom 5. Oktober 2015. Es wird definiert als Gesamtergebnis der Periode vor dem sonstigen Ergebnis der Periode, Ertragsteuern, sonstigem Finanzergebnis, Zinsaufwendungen und Zinserträgen. Die folgende Tabelle zeigt eine Überleitung auf die Position „Gesamtergebnis der Periode":

	Für den Sechsmonatszeitraum zum 30. Juni		**Für das Geschäftsjahr zum 31. Dezember**		
	2021	**2020**	**2020**	**2019**	**2018**
(EUR Tausend)	**(ungeprüft)**		**(geprüft)**		
Gesamtergebnis der Periode	(4.118)	(6.403)	(10.077)	(16.939)	(13.265)
– Sonstiges Ergebnis der Periode	(590)	(49)	1.609	81	(573)
– Ertragsteuern	(7)	(14)	(23)	(2.454)	738
– Sonstiges Finanzergebnis	(16)	(1)	(2)	(2)	(2)
– Zinsaufwendungen	(23)	(30)	(55)	(63)	(550)
– Zinserträge	3	12	21	172	17
Betriebsergebnis/Ergebnis vor Zinsen und Steuern (EBIT)	**(3.485)**	**(6.321)**	**(11.627)**	**(14.673)**	**(12.895)**

[2] Das Ergebnis je Aktie (unverwässert) wird ermittelt, indem der Periodenfehlbetrag durch die gewichtete durchschnittliche Anzahl der ausgegebenen Aktien dividiert wird. Die von der Gesellschaft gewährten ausstehenden Aktienoptionen haben gemäß IAS 33.41 und 33.43 *Earnings per Share* einen Verwässerungsschutz. Daher entspricht das Ergebnis je Aktie (verwässert) dem Ergebnis je Aktie (unverwässert).

Die Anzahl der ausgegebenen Aktien zum 30. Juni 2021 beträgt 11.823.227 (31. Dezember 2020: 5.891.230; 30. Juni 2020: 43.527.692; 31. Dezember 2019: 43.527.692; 31. Dezember 2018: 36.021.540). Zum Datum des Prospekts beläuft sich die Anzahl der ausgegebenen Aktien auf 12.232.303.

b. Wesentliche Finanzinformationen aus den Konzern-Bilanzen

		Zum 31. Dezember		
	Zum 30 Juni 2021	**2020**	**2019**	**2018**
(EUR Tausend)	**(ungeprüft)**	**(geprüft)**		
Aktiva insgesamt	9.690	6.797	13.989	21.827
Eigenkapital insgesamt.....	6.361	3.864	9.629	18.613

c. Wesentliche Finanzinformationen aus den Konzern-Kapitalflussrechnungen

	Für den Sechsmonatszeitraum zum 30. Juni		**Für das Geschäftsjahr zum 31. Dezember**		
	2021	**2020**	**2020**	**2019**	**2018**
(EUR Tausend)	**(ungeprüft)**		**(geprüft)**		
Cashflow aus operativer Geschäftstätigkeit	(4.223)	(5.516)	(9.571)	(13.506)	(10.351)
Cashflow aus Investitionstätigkeit	993	6	3	47	724
Cashflow aus Finanzierungstätigkeit.....	6.514	3.149	2.982	7.120	13.274

(iii) Was sind die zentralen Risiken, die für die Emittentin spezifisch sind?

Eine Investition in die Neuen Anleihen oder die Neuen Aktien unterliegt einer Reihe von Risiken, von denen einige in diesem Abschnitt und unter Abschnitt „C.*(iii) Welches sind die zentralen Risiken, die für die Wertpapiere spezifisch sind?*“ in dieser Zusammenfassung dargestellt werden. Das Eintreten jedes der folgenden Risiken könnte einen wesentlichen negativen oder negativen Einfluss auf die Geschäfts-, Ertrags- und Finanzlage sowie die Cashflows der Gruppe haben.

Die folgenden Risiken sind wesentliche, für die Gesellschaft spezifische Risiken:

- Wir haben eine Verlusthistorie, erwarten künftig ansteigende Kosten im Zusammenhang mit der Kommerzialisierung von Epi proColon und werden möglicherweise nie Profitabilität erreichen oder erhalten.
- Die Kostenübernahme durch Medicare (einem nationalen Krankenversicherungsprogramm in den USA) für unser Schlüsselprodukt Epi proColon wurde im Januar 2021 verweigert, woraus sich signifikante Verzögerungen unserer Bemühungen zur Kommerzialisierung des Produkts ergeben. Im Lichte dieser Ereignisse und unserem konstanten Bedarf, zusätzliches Kapital einzusammeln, prüfen wir derzeit potenzielle strategische Optionen, inklusive (aber nicht beschränkt auf) ein mögliches Übernahmeangebot eines Dritten an unsere Aktionäre, den Verkauf von Vermögenswerten, eine strategische Partnerschaft oder ein Joint Venture oder die Erschließung alternativer Finanzierungsquellen, zu denen auch die Gewinnung neuer (Eigenkapital-)Investoren gehören kann. Dieser strukturierte Prozess ist kostspielig, zeitaufwendig und kann jederzeit scheitern. Selbst wenn wir eine potenzielle Transaktion im Rahmen dieses strukturierten Prozesses erfolgreich abschließen würden, könnte dies negative Auswirkungen auf unsere Finanzlage und/oder unsere Aktionäre haben.
- Unser Erfolg bei der Vermarktung von Epi proColon und anderen (zukünftigen) Produkten hängt insbesondere von der Kostenerstattung durch Regierungs- und Gesundheitsverwaltungsbehörden, wie Medicare, oder anderen Kostenträgern, wie privaten Krankenversicherungen, ab. Da die Medicare-Erstattung für Epi proColon, unser wichtigstes Produkt, kürzlich abgelehnt wurde, ist es höchst ungewiss, ob und wann ein solcher Erfolg eintritt.
- COVID-19 hat Segmente der Weltwirtschaft negativ getroffen und trifft sie weiterhin negativ und könnte unsere Geschäftstätigkeit ähnlich negativ beeinträchtigen, unter anderem durch eine mögliche Unterbrechung unserer Lieferkette, unserer klinischen Studien und unserer Vermarktungsaktivitäten sowie durch die Verzögerung von Zulassungs- und Erstattungsentscheidungen.
- Unser kommerzieller Fortschritt hängt in erster Linie vom Umsatz unseres Epi proColon-Tests ab und wir sind darauf angewiesen, mit diesem Test erhebliche Einnahmen zu erzielen, um in der Zukunft profitabel zu sein. Als Resultat der aktuellen Ablehnung der Erstattbarkeit für Medicare-Patienten, könnte dies nicht möglich sein.
- Der Erfolg von Epi proColon hängt von der Marktakzeptanz durch Ärzte, Kostenträger, Laborkunden, Patienten und anderen in der medizinischen Fachwelt ab. Sollte es uns nicht gelingen, eine solche Marktakzeptanz zu erreichen, könnte dies unter anderem negative Auswirkungen auf unsere Geschäfts- und Ertragslage haben.

- Da die Krebsvorsorge (d.h. die medizinische Früherkennung) freiwillig ist, hängt die Akzeptanz unserer Produkte von der Bereitschaft von Patienten ab, sich untersuchen zu lassen, was außerhalb unserer Kontrolle liegt.
- Unser Erfolg hängt von der Erlangung, Aufrechterhaltung und Durchsetzung von Patenten und anderen geistigen Eigentumsrechten in Bezug auf unsere Technologien, Produkte und Produktkandidaten ab. Wenn es uns nicht gelingt, solche geistigen Eigentumsrechte zu schützen, sind wir möglicherweise nicht in der Lage, im Wettbewerb zu bestehen. Wir könnten dadurch zum Beispiel unsere Fähigkeit verlieren, andere daran zu hindern, unsere Technologien zu nutzen oder Produkte zu vermarkten, die den unseren ähnlich oder identisch sind, ohne uns dafür zu bezahlen.
- Änderungen der Patentgesetze und deren Auslegung, insbesondere in den Vereinigten Staaten, können es schwierig machen, vorherzusagen, wie Patente in unserer Branche erteilt oder durchgesetzt werden und es ähnlich schwierig machen, den Schutz unserer geistigen Eigentumsrechte sicherzustellen, was unsere Fähigkeit zu effektiven Wettbewerb beeinträchtigen könnte.
- Unsere Produkte, inklusive unserem Schlüsselprodukt Epi ProColon, sowie unsere Produktkandidaten und die Gruppe unterliegen ständiger regulatorischer Überprüfung und regulatorischen Anforderungen wie beispielsweise Post-Zulassungsstudien, woraus, wenn diese nicht wirksam genehmigt bzw. durchgeführt werden, ein Verlust der Zulassung und damit unserer Fähigkeit, solche Produkte zu vermarkten, resultieren könnte.
- Aufgrund unseres erheblichen Verbrauchs an liquiden Mitteln benötigen wir regelmäßig neues Kapital zur Finanzierung unserer Geschäftstätigkeit, die derzeitige Kapitalmaßnahme wird nicht ausreichen, um den Break-even-Punkt der Kapitalflüsse selbst in einem positiven Szenario zu erreichen, und wenn wir nicht in der Lage sind, bei Bedarf ausreichend Kapital zu beschaffen, könnten wir gezwungen sein, unsere Geschäftstätigkeit einzuschränken oder einzustellen und/oder ein Insolvenzverfahren einzuleiten.
- Da wir zur Finanzierung unseres Geschäftsbetriebs laufend zusätzliche Mittel benötigen, sind wir von dem Zustand und der Entwicklung der Kapitalmärkte abhängig. Daher können Finanzmarkt- oder Wirtschaftskrisen und andere Entwicklungen unsere Finanzierungsmöglichkeiten beeinträchtigen und die Kosten der Finanzierung erhöhen, wodurch unser Fortbestand gefährdet wird.

C. Basisinformationen über die Wertpapiere

(i) Welches sind die wichtigsten Merkmale der Wertpapiere?

Die Neuen Anleihen sind nachrangige auf den Inhaber lautende Pflichtwandelanleihen mit einem Nennbetrag von je EUR 100,00. Ihre ISIN lautet DE000A3E5UB2. Die Neuen Anleihen sind unverzinslich (Nullkupon) und haben eine Laufzeit bis zum 29. September 2027. Sie beinhalten neben dem Wandlungsrecht für die Inhaber der Neuen Anleihen auch eine Wandlungspflicht für alle ausstehenden, noch nicht gewandelten Neuen Anleihen bei Fälligkeit. Eine Rückzahlung des Kapitals findet grundsätzlich nicht statt. Vorbehaltlich etwaiger Verwässerungsschutzanpassungen beträgt der Wandlungspreis je Aktie EUR 1,10. Nach Maßgabe der Anleihebedingungen der Neuen Anleihen begründen die Verbindlichkeiten der Gesellschaft aus den Neuen Anleihen nachrangige und unbesicherte Verbindlichkeiten, die allen Verbindlichkeiten gemäß § 39 Abs. 1 Satz 1 Nr. 5 InsO sowie allen anderen gegenwärtigen und zukünftigen Verbindlichkeiten der Gesellschaft, die nach ihren Bedingungen oder aufgrund zwingenden Rechts in gleichem Rang mit Verbindlichkeiten gemäß § 39 Abs.1 Satz 1 Nr. 5 InsO stehen oder solchen Verbindlichkeiten vorgehen, einschließlich entsprechend eingestufter Verbindlichkeiten nach § 38 und § 39 Abs. 1 Satz 1 Nr. 1 bis Nr. 4 InsO, im Rang nachgehen. Die Verpflichtungen der Gesellschaft aus den Neuen Anleihen sind untereinander gleichrangig.

Die Neuen Aktien sind neue, auf den Namen lautende Stückaktien ohne Nennwert, die jeweils einen anteiligen Betrag von EUR 1,00 am Grundkapital der Gesellschaft repräsentieren. Ihre ISIN lautet DE000A3H2184. Sie stammen aus dem von der Hauptversammlung der Gesellschaft am 12. Juni 2020 beschlossenen bedingten Kapital XIV, das durch die außerordentliche Hauptversammlung der Gesellschaft vom 27. November 2020 geändert wurde. Die Neuen Aktien haben, sobald ausgegeben, die volle Gewinnanteilberechtigung ab dem Beginn des Geschäftsjahres, in dem sie jeweils ausgegeben werden, und für nachfolgende Geschäftsjahre oder für den Fall, dass die Neuen Aktien vor der Hauptversammlung der Gesellschaft ausgegeben werden, die über die Verwendung des Bilanzgewinns des vorangegangenen Geschäftsjahres beschließt, die volle Gewinnanteilberechtigung ab Beginn des ihrer jeweiligen Ausgabe vorangegangenen Geschäftsjahres und für nachfolgende Geschäftsjahre. Alle Aktien der Gesellschaft, einschließlich der angebotenen Neuen Aktien, sind Aktien derselben Gattung. Jede Aktie der Gesellschaft, einschließlich jeder Neuen Aktie, verleiht eine Stimme in der Hauptversammlung der Gesellschaft. Die Stimmrechte sind nicht beschränkt. Stimmrechte sind für alle Aktionäre der Gesellschaft gleich. Die Übertragbarkeit der Aktien der Gesellschaft ist weder durch Gesetz noch durch die Satzung der Gesellschaft beschränkt, mit Ausnahme von bestimmte Beschränkungen für Einwohner bestimmter Gerichtsbarkeiten, darunter insbesondere der den Vereinigten Staaten. Sobald die jeweiligen Neuen Aktien ausgegeben worden sind, werden die Neuen Aktien Anspruch auf einen Anteil am Liquidationserlös oder Insolvenzüberschuss im Verhältnis ihres rechnerischen Anteils am Grundkapital haben. Die Fähigkeit und Absicht der Gesellschaft, in Zukunft Dividenden auszuschütten, wird von ihrer Finanz- und Ertragslage, ihrem Kapitalbedarf, ihren Investitionsalternativen und anderen Faktoren

abhängen. Die Gesellschaft hat in der Vergangenheit keine Dividenden ausgezahlt, kann keine Gewähr dafür bieten, dass sie in künftigen Jahren Dividenden ausschütten wird, und beabsichtigt derzeit nicht, in der Zukunft Dividenden auszuschütten.

(ii) Wo werden die Wertpapiere gehandelt?

Die Gesellschaft beabsichtigt nicht, die Neuen Anleihen zu einem geregelten Markt zuzulassen oder die Neuen Anleihen in den Handel im Freiverkehr einzubeziehen. Vorbehaltlich dessen werden die Neuen Aktien am regulierten Markt an der Frankfurter Wertpapierbörse und gleichzeitig im Teilbereich des regulierten Marktes mit weiteren Zulassungsfolgepflichten (*Prime Standard*) an der Frankfurter Wertpapierbörse gehandelt werden, in dem die Aktien der Gesellschaft bereits gehandelt werden.

(iii) Welches sind die zentralen Risiken, die für die Wertpapiere spezifisch sind?

Die folgenden Risiken sind wesentliche, für die Neuen Anleihen und/oder die Neuen Aktien spezifische Risiken:

- Insbesondere wegen unserer relativ geringen Marktkapitalisierung könnten der Marktpreis und das Handelsvolumen der Aktien der Gesellschaft erheblich schwanken und Aktionäre könnten ihre Investition ganz oder teilweise verlieren. Da die Neuen Anleihen spätestens im Jahr 2027 in Aktien der Gesellschaft umgewandelt werden, sind die Inhaber der Neuen Anleihen auch dem Marktpreisrisiko in Bezug auf die Aktien der Gesellschaft ausgesetzt und jede nachteilige Entwicklung in Bezug auf die Aktien wird sich letztlich auch nachteilig auf die Inhaber der Neuen Anleihen auswirken.
- Aktuelle und/oder zukünftige Angebote von Schuld- oder Beteiligungspapieren durch uns könnten den Marktpreis der Wertpapiere der Gesellschaft wesentlich negativ beeinflussen und zukünftige Kapitalmaßnahmen könnten die Anteile unserer Aktionäre an der Gesellschaft sowie ihre Stimmrechte erheblich verwässern.
- Die Neuen Anleihen gehen allen vorrangigen Schuldtiteln im Rang nach und die Inhaber der Neuen Anleihen werden vor der Wandlung keine Aktionärsrechte haben, wodurch die Anleihegläubiger ihre Investition verlieren könnten und insbesondere weniger Einfluss haben als Aktionäre.

D. Basisinformationen über das öffentliche Angebot von Wertpapieren und die Zulassung zum Handel an einem geregelten Markt

(i) Zu welchen Konditionen und nach welchem Zeitplan kann ich in diese Wertpapiere investieren?

a. Umfang des Angebots und der Zulassung zum Handel

Das Angebot bezieht sich auf das öffentliche Angebot in Deutschland seitens der Gesellschaft von den Neuen Anleihen, also nachrangigen auf den Inhaber lautende Pflichtwandelanleihen im Gesamtnennbetrag von EUR 16.500.000,00, bestehend aus 165.000 Teilschuldverschreibungen mit einem Nennbetrag von je EUR 100,00 (ISIN: DE000A3E5UB2), in Form eines Bezugsrechts für bestehende Aktionäre der Gesellschaft (inklusive einer Möglichkeit zum Überbezug). Die Bank fungiert als Bezugsstelle.

Die Gesellschaft und die Bank beantragten gemeinsam die Zulassung der Neuen Aktien zum Handel am regulierten Markt der Frankfurter Wertpapierbörse am 10. August 2021. Sobald die Neuen Aktien vorfristig lieferbar sind, was gleichzusetzten ist mit der Aufnahme des Handels der Neuen Aktien am regulierten Markt der Frankfurter Wertpapierbörse und für den oder um den 17. September 2021 erwartet wird, können die Neuen Aktien an diesem Markt gekauft und verkauft werden.

b. Voraussichtlicher Zeitplan

Der voraussichtliche Zeitplan für das Angebot und die Zulassung (Änderungen bleiben vorbehalten) sieht wie folgt aus:

24. August 2021	• Billigung des Prospekts durch die BaFin und Veröffentlichung des gebilligten Prospekts auf der Website der Gesellschaft.
26. August 2021	• Veröffentlichung des Bezugsangebots bezüglich der Neuen Anleihen im Bundesanzeiger.
27. August 2021	• Beginn der Bezugsfrist für die Neuen Anleihen. • Handel der Aktien der Gesellschaft „ex Bezugsrecht". • Aufnahme des Bezugsrechtshandels für die Neuen Anleihen.
8. September 2021, 12:00 Uhr (MESZ)	• Ende des Bezugsrechtshandels für die Neuen Anleihen.
10. September 2021	• Ende der Bezugsfrist für die Neuen Anleihen.
13. September 2021	• Bekanntgabe der endgültigen Ergebnisse des Angebots auf der Website der Gesellschaft.
14. September 2021	• Einbuchung der Neuen Anleihen.
15. September 2021	• Voraussichtliche Zulassungsentscheidung der Frankfurter Wertpapierbörse über die Neuen Aktien.

17. September 2021	• Vorfristige Lieferbarkeit der Neuen Aktien, die der Aufnahme des Handels der Neuen Aktien an der Frankfurter Wertpapierbörse entspricht.

c. Angebotsbedingungen

Die Neuen Anleihen werden den Aktionären gegen Barleistung in Höhe von 100% des jeweiligen Nennbetrags, entsprechend EUR 100,00 je Neuer Anleihe, in einem Bezugsverhältnis von 74 : 1 bzw. 74 : EUR 100,00 angeboten. Um ein glattes Bezugsverhältnis zu ermöglichen, hat ein bestehender Aktionär auf die Bezugsrechte aus 22.303 bestehenden Aktien der Gesellschaft verzichtet. Den Aktionären wird das gesetzliche Bezugsrecht als mittelbares Bezugsrecht gewährt in der Weise, dass die Bank in ihrer Eigenschaft als Bezugsstelle zur Zeichnung und Übernahme der Neuen Anleihen zugelassen wird mit der Verpflichtung, sie den Aktionären der Gesellschaft zuzuweisen. Die Bezugsrechte werden außerhalb der Vereinigten Staaten in Übereinstimmung mit der Regulation S des Securities Act („**Regulation S**“) frei übertragbar und erwartungsgemäß in der Zeit vom 27. August 2021 (einschließlich) bis zum 8. September 2021, 12:00 Uhr (MESZ), im Freiverkehr der Hanseatischen Wertpapierbörse Hamburg handelbar sein. Planmäßig werden sie bei den Depotbanken der Aktionäre durch die Wertpapiersammelbank Clearstream Banking AG, Mergenthalerallee 61, 65760 Eschborn, Deutschland am oder um den 14. September 2021 eingebucht. Maßgeblich für die Ermittlung der den Aktionären jeweils zustehenden Bezugsrechte ist deren jeweilige Bestand an Aktien bei Ablauf des 30. August 2021 (*Record Date*).

Bezugsrechte können voraussichtlich in der Zeit vom 27. August 2021 bis zum 10. September 2021 (jeweils einschließlich) über die jeweilige Depotbank des Anleihegläubigers bei der Bank während der üblichen Schalterstunden ausgeübt werden. Inhaber von Bezugsrechten, die ihre Bezugsrechte ausüben möchten, müssen auch den Bezugspreis je Neuer Anleihe bei Ausübung des Bezugsrechts, spätestens jedoch am letzten Tag der Bezugsfrist, über ihre Depotbank an die Bank in ihrer Eigenschaft als Bezugsstelle entrichten. Darüber hinaus kann jeder Aktionär oder Investor, der sein Bezugsrecht vollständig ausübt (mit Ausnahme etwaiger Restbezugsrechte, die zu Bruchteilen von Neuen Anleihen führen würden), verbindliche Aufträge für weitere Neue Anleihen zum Bezugspreis für bis zu drei Mal so viele Neue Anleihen, wie für die er seine Bezugsrechte ausgeübt hat, abgeben („**Überbezug**“). Soweit es wegen hoher Nachfrage im Rahmen des Überbezugs nicht möglich ist, alle Aufträge, die Teil des Überbezugs sind, zu bedienen, werden Neue Anleihen anteilig ausgegeben. In Bezug auf daraus resultierende Bruchteile haben die Aktionäre keinen Anspruch auf die Lieferung von Neuen Anleihen oder Barausgleich.

Bezugsrechte, die von Aktionären gehalten werden, die in den Vereinigten Staaten ansässig sind, können nur nach Bestätigung der folgenden Zusicherungen ausgeübt werden: (a) Er/sie nimmt zur Kenntnis, dass die Bezugsrechte, die Neuen Anleihen und die Neuen Aktien nicht nach dem Securities Act oder einem anderen anwendbaren Wertpapiergesetz eines US-Bundesstaates registriert wurden und werden und im Rahmen einer Transaktion angeboten und ausgegeben oder verkauft werden, die kein öffentliches Angebot in den Vereinigten Staaten beinhaltet und die von den Registrierungserfordernissen des Securities Act befreit ist; (b) er/sie die Bezugsrechte, die Neuen Anleihen bzw. die Neuen Aktien zu Anlagezwecken und nicht im Hinblick auf einen Vertrieb (im Sinne der US-Bundeswertpapiergesetze) der Wertpapiere erwirbt; (c) er/sie weiß, dass die Bezugsrechte, die Neuen Anleihen und die Neuen Aktien beschränkte Wertpapiere im Sinne von Rule 144(a)(3) des Securities Act sind; und (d) er/sie wird die Bezugsrechte, die Neuen Anleihen und die Neuen Aktien nur in Übereinstimmung mit Regulation S oder gemäß einer wirksamen Registrierungserklärung nach dem Securities Act übertragen.

Die Gesellschaft und die Bank sind berechtigt, das Angebot jederzeit auch noch nach Ablauf der Bezugsfrist und bis zur Lieferung der Neuen Anleihen zu beenden, wenn (i) die Ausgabe der Neuen Anleihen aus Rechtsgründen unzulässig oder unmöglich ist oder (ii) der Vorstand und der Aufsichtsrat zu der Einschätzung kommen, dass die Durchführung des Angebots nicht mehr im Unternehmensinteresse liegt.

d. Verwässerung

Durch die Ausübung oder die zwingende Auslösung der Wandlungsrechte der Inhaber der Neuen Anleihen wird der prozentuale Anteil anderer Aktionäre der Gesellschaft, die keine Neuen Anleihen halten, sinken und deren Stimmrechte durch die Ausgabe Neuer Aktien verwässert werden. Unter den Neuen Anleihen werden insgesamt bis zu 15.000.000 Neue Aktien (vorbehaltlich Anpassungen aufgrund zukünftiger Kapitalmaßnahmen) ausgegeben werden, wenn Wandlungsrechte ausgeübt oder zwingend ausgelöst werden, bis spätestens zum 30. September 2027. Basierend auf einer Anzahl von 12.232.303 ausstehenden Aktien der Gesellschaft zum Datum des Prospekts führt dies letztlich zu einer Verwässerung von 55,1% für Aktionäre, die keine Neuen Anleihen halten.

Darüber hinaus sind zum Datum des Prospekts Pflichtwandelanleihen ausstehend, die im Februar 2021 ausgegeben wurden und die bei ihrer Wandlung den prozentualen Anteil der Aktien und die Stimmrechte der Aktionäre der Gesellschaft, die die entsprechenden Anleihen nicht halten, weiter verwässern werden.

Unter der Annahme der vollständigen Ausgabe und Wandlung aller der Neuen Anleihen würde sich, nach Abzug der geschätzten Aufwendungen für das Angebot und die Börsenzulassung, das buchmäßige Eigenkapital (entsprechend der Bilanzsumme abzüglich der immateriellen Vermögenswerte, der langfristigen Verbindlichkeiten und der kurzfristigen Verbindlichkeiten) der Gesellschaft zum 30. Juni 2021 für die Altaktionäre der Gesellschaft um EUR 0,27 bzw. 50,2% je Aktie erhöhen und für die

ehemaligen Inhaber der Neuen Schuldverschreibungen zu einer unmittelbaren Verringerung des buchmäßige Eigenkapitals je Aktie von EUR 0,30 bzw. 27,3% je Aktie führen.

e. Gesamtkosten

Die Kosten der Gesellschaft im Zusammenhang mit dem Angebot und der Zulassung belaufen sich voraussichtlich auf insgesamt ca. EUR 1,35 Millionen, die vollständig von der Gesellschaft getragen werden. Die Kosten umfassen im Wesentlichen Kosten für die Erstellung des Prospekts, zu zahlende oder gezahlte Gebühren an die Bank bzw. die Deutsche Balaton Aktiengesellschaft, Heidelberg, Deutschland („**Deutsche Balaton**"), sowie zu zahlende Gebühren sowie Zulassungsgebühren und sonstige Beraterkosten.

Weder die Gesellschaft noch die Bank in ihrer Eigenschaft als Bezugsstelle werden den Anlegern Kosten in Rechnung stellen. Jedoch werden Anleger die von ihren Wertpapierhändlern oder anderen Finanzinstituten erhobenen Gebühren für den Kauf und das Halten von Wertpapieren selbst tragen müssen.

(ii) Wer ist der Anbieter und/oder die die Zulassung zum Handel beantragende Person?

Das Angebot wird von der Gesellschaft durchgeführt. Die Gesellschaft und die mwb fairtrade Wertpapierhandelsbank AG, eine Aktiengesellschaft mit Sitz in der Rottenbucher Str. 28, 82166 Gräfelfing, deutschem Recht unterliegend und agierend als Zulassungsantragssteller, haben gemeinsam die Zulassung der Neuen Aktien zum Handel beantragt.

(iii) Weshalb wird dieser Prospekt erstellt?

a. Gründe für das Angebot und die Zulassung

Die Gesellschaft beabsichtigt, durch das Angebot zusätzliche Finanzierungsmittel zu erhalten. Die Gesellschaft strebt gemeinsam mit der Bank die Zulassung an, um den Inhabern der Neuen Anleihen bei Wandlung Neue Aktien liefern zu können, die zum Handel im regulierten Markt an der Frankfurter Wertpapierbörse und gleichzeitig zum Handel im Teilbereich des regulierten Marktes mit weiteren Zulassungsfolgepflichten (*Prime Standard*) zugelassen sind.

b. Verwendung und geschätzter Nettobetrag der Erlöse

Der Gesellschaft fließen nur aus dem Angebot, nicht aber aus der Zulassung Erlöse zu. Unter der Annahme einer vollständigen Platzierung der Neuen Anleihen werden sich die Erlöse nach Abzug aller Kosten für die Zulassung und das Angebot voraussichtlich auf etwa EUR 15,15 Millionen belaufen (Nettoerlöse). Die Gesellschaft beabsichtigt, die Nettoerlöse aus dem Angebot primär (ungefähr EUR 11,0 Millionen) zur Finanzierung der Entwicklung des Produktkandidaten und blutbasierten Darmkrebs-Früherkennungstests, Epi proColon Next-Gen, unter anderem durch die Initiierung einer klinischen Studie in den USA, zu nutzen. Die verbleibenden Erlöse aus dem Angebot, die erwartungsgemäß ungefähr EUR 4,15 Millionen betragen sollen, sind für allgemeine Unternehmenszwecke bestimmt, insbesondere für die Verfolgung der Kommerzialisierung des blutbasierten Darmkrebs-Früherkennungstest Epi proColon

c. Wesentlichste Interessenkonflikte in Bezug auf das Angebot und die Zulassung

Am 15. Juli 2021 schlossen die Gesellschaft und die Bank einen Mandatsvertrag hinsichtlich der Abwicklung der Durchführung des Angebots und der Zulassung, in dem sich die Bank unter anderem und unter bestimmten Bedingungen verpflichtete, durch Abschluss eines Zeichnungsvertrags mit der Gesellschaft die Neuen Anleihen in dem Umfang zu übernehmen, indem Aktionäre die Neuen Anleihen gezeichnet haben, und diese Neuen Anleihen im Rahmen eines öffentlichen Angebots den Aktionären der Gesellschaft in Verbindung mit einem mittelbaren Bezugsrecht zum Bezug anzubieten sowie gemeinsam mit der Gesellschaft die Zulassung der Neuen Aktien zum Handel am regulierten Markt der Frankfurter Wertpapierbörse und gleichzeitig zum Handel im Teilbereich davon mit weiteren Zulassungsfolgepflichten (*Prime Standard*) zu beantragen. Gemäß diesen Vereinbarungen erhält die Bank eine fixe Provision von der Gesellschaft. Die Gesellschaft geht daher davon aus, dass die Bank ein finanzielles Interesse an dem erfolgreichen Abschluss der Transaktion hat, was einen potentiellen Interessenskonflikt begründet.

Darüber hinaus schlossen die Gesellschaft und ihre Aktionärin, die Deutsche Balaton (eine Gesellschaft, die von Wihelm K. T. Zours beherrscht wird), am 11. Juni 2021 einen Bezugs- und Rückhaltevertrag, wie nachfolgend am 20. August 2021 geändert, in dem sich die Deutsche Balaton unter anderem und unter bestimmten Bedingungen verpflichtete, alle zum Ende der Bezugsfrist nicht ausgegebenen Neuen Anleihen, zum Bezugspreis zu erwerben und dadurch ihren Anteilsbesitz und ihre Stimmrechte an der Gesellschaft möglicherweise überproportional zu erhöhen, sowie sich an zukünftigen Kapitalmaßnahmen der Gesellschaft zu beteiligen. Darüber hinaus haben sich die Deutsche Balaton und ihre Tochtergesellschaft ABC Beteiligungen AG (i) gegenüber der Bank, für einen Zeitraum von sechs Monaten ab Erklärung der vorfristigen Lieferbarkeit, zu einer Lock-up-Verpflichtung verpflichtet bezüglich (a), im Falle der Deutschen Balaton, aller Neuen Anleihen, die im Rahmen des oben genannten Bezugs- und Rückhaltevertrags erworben wurden, und aller Aktien der Gesellschaft, die aus der Umwandlung dieser Neuen Anleihen resultieren sowe mindestens zusätzliche 950.395 Aktien der Gesellschaft, und (b), im Falle der ABC Beteiligungen AG, mindestens 233.161 Aktien der Gesellschaft und (ii) jeweils auf jegliche Haftung der Bank, die sich aus dem Prospekt oder dem Zulassungsantrag der neuen Aktien zu einem geregelten Markt ergeben könnte, verzichtet. Die Gesellschaft geht daher davon aus, dass die Deutsche

Balaton und die ABC Beteiligungen AG ein finanzielles und strategisches Interesse an dem erfolgreichen Abschluss der Transaktion haben, was einen potentiellen Interessenskonflikt begründet.

Darüber hinaus halten alle Mitglieder unseres Vorstands und unseres Aufsichtsrates direkt oder indirekt Aktien, Wandelanleihen und/oder Aktienoptionsrechte der Gesellschaft und könnten im Rahmen des Angebots Neue Anleihen erwerben und damit ihre Beteiligung an der Gesellschaft in Zukunft erhöhen. Daher können sie, getrennt von ihren jeweiligen Organfunktionen, finanzielle und wirtschaftliche Interessen an der Entwicklung des Aktienkurses der Gesellschaft oder dem Angebot oder der Zulassung haben, was einen potentiellen Interessenkonflikt begründet.

1. RISK FACTORS

*Prospective investors should carefully consider the risk factors set out in the two prospectuses contained in this document (together, the "**Prospectus**"), before investing in the bonds or the shares of Epigenomics AG (the "**Company**" or "**Epigenomics**" and, together with its consolidated subsidiary, the "**Epigenomics Group**", the "**Group**" or "**we**", "**our**" and "**us**"). The risk factors set out below are limited to risks specific to the Epigenomics Group, or the bonds and/or the shares of Epigenomics. In each category, the most material risks, in the assessment undertaken by the Company, taking into account the expected magnitude or their negative impact on the Company and the probability of their occurrence, are set out first, with the two, and in case of 1.1. "— Risks Related to our Business" three, most material risk factors mentioned at the beginning of each category. The Company has further assessed the relative materiality of each risk compared to other risks over all categories based on the relevant risk's potential impact on the Company and its bonds and/or the shares, as well as the probability of its occurrence. Statements on this assessment as of the date of the Prospectus are included in the risk factors by means of statements whether the risk has a "material adverse effect" or an "adverse effect". As both impact and probability were taken into account when determining the potential influence, it is possible that a risk with a comparatively higher probability of occurrence, but a comparatively lower impact is considered to have a "material adverse effect" and vice versa.*

The occurrence of any of these risks could have a material adverse or adverse effect on the business, results of operations, financial position, and/or cash flow of the Group. Consequently, the value of the bonds and/or the shares of Epigenomics could decrease as a result of the occurrence of any of these risks, and prospective investors could lose all or part of their investment.

1.1. Risks Related to our Business

1.1.1. We have a history of losses, expect to incur increasing costs in the future in connection with the planned commercialization of Epi proColon, and may never achieve or maintain profitability.

Since inception, we have incurred significant operating losses. In particular, in the six-month period ended June 30, 2021, we incurred a net loss for the period of EUR 3,528 thousand and for the financial years ended December 31, 2020, 2019 and 2018, we incurred a net loss for the year of EUR 11,686 thousand, EUR 17,020 thousand and EUR 12,692 thousand, respectively.

Historically, our losses have resulted principally from our research and development efforts, our sales and marketing efforts, and our general and administrative expenses. We used to pursue a business model focused on the identification and out-licensing of various biomarkers and/or our proprietary technologies. In recent years, we have transitioned to a new business model where we aim to focus on developing molecular cancer diagnostic tests that use our proprietary biomarkers. We expect to continue to incur significant operating costs and anticipate that our expenses and losses will increase under this business model. These costs relate, among others, to the planned commercial exploitation of our key product, Epi proColon, a blood-based screening test for the early detection of colorectal cancer, which is based on a specific DNA methylation of a certain gene (the "**Septin9**" gene) providing instructions for making a protein called Septin9, as well as the further development of our key product candidate, Epi proColon Next-Gen, which is a yet more advanced version of our colorectal cancer ("**CRC**") screening blood test.

Our current business strategy focuses on the commercialization of Epi proColon in the United States of America ("**United States**" or "**U.S.**") as well as the further development of our product candidate,

Epi proColon Next-Gen. On April 12, 2016, Epi proColon was approved for sale in the United States by the U.S. Food and Drug Administration ("**FDA**"). For the successful commercialization of Epi proColon and, consequently, achieving break-even and potentially profitability in the future, we believe positive decisions on the reimbursement by third-party payors, such as government and health administration authorities or private health insurers, to be crucial. This is in particular true for coverage of the Epi proColon test under Medicare, a national health insurance program in the United States, which we estimate covers approximately 40% of potential patients who could be tested using Epi proColon in the United States (*i.e.,* patients 65 to 75 years of age; estimate based on U.S. census data on health insurance coverage as of 2020) ("**Medicare**"). Those patients do not only represent a large portion of the relevant market for Epi proColon in the United States, but Medicare has also typically been viewed as an industry benchmark for pricing and benefit coverage. Hence, not achieving Medicare coverage for Epi proColon could have a material adverse effect on our ability to commercialize Epi proColon in the United States.

Generally, Medicare coverage of preventive services (such as our Epi proColon test) is achieved through a decision by the U.S. Centers for Medicare and Medicaid Services ("**CMS**"), the federal agency that administers Medicare (so called National Coverage Determination, "**NCD**"), or through legislation mandating Medicare coverage. In April 2019, we filed a formal request with CMS for an NCD of Epi proColon, which, however, was denied by CMS on January 19, 2021. We are currently evaluating options regarding the denied Medicare coverage, but there can be absolutely no guarantee that CMS's decision will ever be successfully overturned or that we achieve Medicare coverage for Epi proColon in any other way, such as, for example, through legislation. For details, see *1.1.3. "— Our success in commercializing Epi proColon and other (future) products depends in particular on reimbursement from government and health administration authorities, such as Medicare, or other third-party payors like private health insurers. As Medicare coverage for Epi proColon, our most important product, was recently denied, it is highly uncertain if and when such success will be achieved."*

But even if we achieve reimbursement, our attempt to broadly commercialize Epi proColon is expected to result in an increase of our expenses, for example due to costs relating to the employment of operational, marketing, as well as sales and general administrative personnel. In addition, we are required by the FDA to conduct a post-approval clinical study for Epi proColon, which we initiated in 2016 and expect to entail substantial costs. Moreover, we may incur further costs for studies to support reimbursement decisions. Accordingly, we do not expect to reach the break-even point in the near term and may, therefore, need to rely on further cash inflows from financing activities or may pursue other strategic options, see *1.1.2. "— Medicare coverage for our key product, Epi proColon, was denied in January 2021, resulting in significant delays in our efforts to commercialize the product. In light of these events, and our constant need to raise additional funds, we are currently exploring potential strategic options including, but not limited to, a third party potentially submitting a takeover offer to our shareholders, the sale of assets, a strategic partnership or joint venture, or developing alternative financing sources which may include attracting new (equity) investors. This structured process is costly, time-consuming and may fail at any point. Even if we were to successfully conclude a potential transaction as part of this structured process, it could have a negative impact on us and/or our shareholders."* In addition, there is no guarantee that any such costs will ever pay off, and if we do not manage to generate significant revenue in a timely manner or at all, we may never achieve or maintain profitability.

1.1.2. Medicare coverage for our key product, Epi proColon, was denied in January 2021, resulting in significant delays in our efforts to commercialize the product. In light of these events, and our constant need to raise additional funds, we are currently exploring potential strategic options including, but not limited to, a third party potentially submitting a takeover offer to our shareholders, the sale of assets, a strategic partnership or joint venture, or developing alternative financing sources which may include attracting new (equity) investors. This structured process is costly, time-consuming and may fail at any point. Even if we were to successfully conclude a potential transaction as part of this structured process, it could have a negative impact on us and/or our shareholders.

In light of the recent negative reimbursement decision for Epi proColon by CMS and the resulting significant delay in any commercialization efforts regarding Epi proColon, as well as our constant need to raise additional funds as we have not reached (and might never reach) the cash flow break-even point, we have initiated a structured process in February 2021 to explore and evaluate alternative strategic options. To this end, we have engaged a financial advisor that is assisting us in structuring this process and evaluating our options. Such a process, which does not provide any guarantee of success, may prove overly costly and time-consuming, and divert management time and attention.

As part of this process, we are considering a wide variety of strategic options including, but not limited to, a third party potentially submitting a takeover offer to our shareholders, the sale of all or substantially all of our assets, a strategic partnership or joint venture, or developing alternative financing sources which may include attracting new (equity) investors, for example, through an initial public offering of a (newly established) subsidiary on NASDAQ. Any of these and potential other options may provide different advantages and challenges. Also, because of the complexity of such processes and transactions, the interest of all stakeholders involved therein including, for example, members of management and current shareholders may not always be fully-aligned. In particular, the perceived individual benefit from different strategic options may vary among stakeholders.

Moreover, there can be no assurance that we succeed in identifying suitable strategic options at all which could have a material adverse effect on our future prospects. Even if we were to procure one or multiple strategic options, the implementation of any option is generally complex and time-consuming and may fail at any point during the process for a number of reasons, many of which are beyond our control. For example, we do not only have to agree with a potential partner on the details of the potential transaction, but, depending on the structure of such transaction, we may also need the approval of authorities and/or our shareholders.

In addition, even if we are able to successfully conclude a potential transaction as part of this structured process, there may be certain material risks for our shareholders associated with the specific transaction. Depending on how a potential transaction may be structured, such risks could include potential conflict of interests between stakeholders such as a new investor and the existing shareholders, material adverse effects from a change of control in the Company, a dilution of current shareholders' rights, and potentially even the exclusion of our current shareholders (so-called squeeze-out), not allowing them to participate in any potential future profits or value enhancements of the Company.

1.1.3. Our success in commercializing Epi proColon and other (future) products depends in particular on reimbursement from government and health administration authorities, such as Medicare, or other third-party payors like private health insurers. As Medicare coverage for Epi proColon, our most important product, was recently denied, it is highly uncertain if and when such success will be achieved.

Maintaining and growing sales of our products, in particular our key product, Epi proColon, and our product candidates, specifically Epi proColon Next-Gen, that we may commercialize in the future depends on our ability and the ability of our commercial partners (such as Polymedco Cancer Diagnostics Products LLC, New York, United States ("**Polymedco**")) to sell our products to clinical and genetic laboratories ("**Laboratory Customers**"). The demand for our product depends to a large extent on the availability of reimbursement for the cost of our tests by patients' third-party healthcare payors (*e.g.*, Medicare or private insurance companies).

We believe adequate reimbursement under the Medicare program is particularly critical for the future success in commercializing Epi proColon. Thus, in April 2019, we filed a formal request with CMS to review Epi proColon as part of an NCD. Our formal request was accepted by CMS on February 28, 2020, but on January 19, 2021 CMS issued its final NCD, stating that Epi proColon is not eligible for Medicare coverage as it does not meet the criteria for an appropriate blood-based biomarker CRC screening test.

We are currently evaluating options with regard to the national non-coverage determination by CMS and, in the next months, plan to meet with CMS' leadership which has been newly appointed since the negative reimbursement decision. As we have not identified any direct actions we may take against the NCD, we are particularly looking into the option to support an aggrieved third party like, for example, a Medicare beneficiary whose physician has prescribed the Epi proColon test or whose reimbursement request for his individual Epi proColon test has been denied. Unlike us, such an aggrieved third party (if we can find any such aggrieved party willing to initiate proceedings) may file an appeal to have the NCD reviewed by the competent U.S. Department of Health and Human Services' Departmental Appeals Board ("**DAB**"). In this case, we may ask DAB to get us involved into the process which would enable us to provide legal submissions and offer an alternative or additional perspective. However, we would not formally become a party to the review proceedings and, thus, would have only limited capabilities to influence the outcome of such proceedings. In particular, the aggrieved third party who filed the appeal might withdraw such appeal at any time without our consent. If DAB rejects the appeal that decision may ultimately be challenged in court. We estimate that (indirectly) challenging the NCD in front of the DAB and subsequently in court would, in combination, take at least one to two years and involve significant costs for us to bear.

In any event, there can be absolutely no guarantee that the NCD might be successfully overturned by any such proceedings and, in contrast, there are only few precedents where an aggrieved party was successful in overturning a negative NCD by any such proceedings. Hence, as the timing and outcome of any attempt to overturn the negative NCD is uncertain, our ability to successfully commercialize Epi proColon in the short to medium term is substantially limited.

While, in addition to an NCD issued by CMS, Medicare coverage can also be achieved through legislation mandating Medicare coverage for all FDA-approved blood tests for colorectal cancer screening. There have been certain (draft) bills in the U.S. Congress in the past and recently, on March 8, 2021, a bill was introduced to amend the Social Security Act to provide Medicare coverage for FDA-approved qualifying CRC screening blood-based tests. However, the timing and success of such legislation remains highly uncertain, including due to political unpredictability and policy considerations.

If we cannot achieve legislation or an NCD that allows Epi proColon to be covered by Medicare, it could have a material adverse effect on our revenue from Epi proColon in the key U.S. market, which may be materially lower than initially expected and we may not earn an appropriate return on our investment in this key product, wherefore we might decide to discontinue our commercialization efforts of Epi proColon or may consider strategic alternatives, including, for example, the sale of assets such as intellectual property rights, co-operation with competitors or other potential partners and the discontinuation of operations.

In addition, with respect to the reimbursement by private insurance companies and healthcare programs, our Laboratory Customers have experienced sales teams, which aim to negotiate commercially acceptable and sufficiently attractive contracts for our products with, and collect reimbursement from, such third-party payors. We do not negotiate arrangements or collect reimbursement from private healthcare payors ourselves. However, especially as third-party payors are increasingly limiting coverage and reducing reimbursement for medical products and services, our Laboratory Customers may be unable to successfully negotiate arrangements with third-party payors for our products, in particular our key product, Epi proColon, and our product candidates, specifically Epi proColon Next-Gen, if, for example, such healthcare payors consider testing services based on our products not to be cost-effective, if our products are not endorsed by guidelines of medical professional societies or if there is insufficient demand from healthcare providers and patients. In particular, the negative reimbursement decision for Epi proColon by CMS may have a negative impact on reimbursement decisions by other major payors in the U.S. health system. If our Laboratory Customers fail to negotiate such arrangements and, as a result, there is inadequate or no coverage by third-party payors, or if there is any delay in concluding such arrangements or in collecting reimbursements thereunder, our products become significantly less attractive to the Laboratory Customers, thus, resulting in reduced order volume for our products. The unavailability or inadequacy of third-party coverage or reimbursement may result in a decrease in patient demand for, and physician utilization of, our products and a reduction in our Laboratory Customers' sales efforts.

Further, even if we were able to achieve positive reimbursement decisions, CMS and/or third-party healthcare payors may revoke the respective reimbursement status of our products, causing a material adverse effect on, among other things, our order volume and limiting the revenue opportunities from our products.

1.1.4. COVID-19 has, and continues to, negatively affect segments of the global economy and has similarly negatively affected our operations, including, among other things, interrupting our supply chain, clinical trials and commercialization activities, as well as, delaying approvals and reimbursement decisions and may continue to do so in the foreseeable future.

COVID-19 has negatively affected segments of the global economy, disrupted global supply chains, as well as created significant volatility and disruption of financial markets, and in turn has had negative effects on our business. The continuing threat of COVID-19, including the emergence of novel mutations of the virus, particularly in case of renewed lock-downs in Germany, the United States and/or other regions, is likely to have a negative effect on our business in the future. COVID-19 has resulted in, among other things, travel and other restrictions in order to reduce the spread of the disease, including public health directives and orders, for example in the United States and Europe, that, among other things and for various periods of time, directed individuals to stay at their homes, directed businesses and governmental agencies to cease non-essential operations in workplaces, and prohibited certain non-essential gatherings and events as well as non-essential travel. These measures resulted in, among other things, many preventive medical examinations,

such as cancer screenings, being postponed or canceled. For example, in the United States in April 2020, screenings for breast, colon, prostate, and lung cancers were lower by 85%, 75%, 74%, and 56%, respectively, compared to April 2019 (source: Study on the impact of COVID-19 on cancer care, dated November 2020, available at: https://pubmed.ncbi.nlm.nih.gov/33253013/). Reflecting this development, we saw a significant decrease in sales of our tests in the United States. In addition, many clinical trial and regulatory reviews and approvals, including those currently conducted by us or our commercial partners, experienced substantial delays as a result of COVID-19, the related containment measures, limitations or redirection of human or material resources and the overall stress placed on the administrative apparatus and health care system. For instance, our post-approval clinical study for Epi proColon, which we initiated in 2016, has been negatively impacted by COVID-19 as all of the study sites paused all on-going work. In addition, COVID-19 increasingly led laboratories to prioritize COVID-19 tests, a trend that is likely to continue at least in the near term as the world sees renewed waves of the disease. Other effects included an overall reduced productivity, including of our R&D activities, resulting from remote working arrangements and limited resources due to, for example, short-time work (*Kurzarbeit*) at our Berlin site. Any of these and other unforeseen effects resulting from COVID-19 may continue for as long as the pandemic is not fully under control, if and to the extent that any easing of COVID-19-related restrictions is reversed, or in case of long-term consequences such as a global recession even beyond that.

A recession or market slump in global financial markets resulting from COVID-19 or its aftermath could negatively affect, among other things, the value of our securities. In case of a prolonged financial and/or stock market crisis, access to additional capital may be challenging and may not be able to obtain sufficient cash inflows from financing activities at acceptable conditions or at all, see also *1.5.2. "Financial Risks — As we need additional funds on an ongoing basis to finance our operations, we are dependent on the condition and the development of the capital markets. Hence, financial market or economic crises and other developments may compromise our financing options and increase the costs of financing, jeopardizing our future existence."*

The overall extent of the impact of COVID-19 on our operational and financial performance, including our ability to execute our business strategy in the expected time frame or at all, will depend on future developments, such as the duration and spread of COVID-19 and novel mutations thereof, the success of vaccination campaigns, COVID-19-related restrictions and implications as well as the overall economic effects therefrom, all of which are uncertain and cannot be predicted.

As our ability to both produce and commercialize in particular our key product, Epi proColon, fundamentally relies upon the overall conditions of the industry we operate in, we are particularly prone to impacts of COVID-19 or future other similar pandemics, epidemics, outbreaks of infectious diseases or other serious public health crises. Such conditions include, among others, sufficient demand for cancer diagnostics, functional logistic chains and well-funded health systems. Events, such as COVID-19, may cause a shift in public focus as regards the global health industry, which can in turn lead to a reallocation of funds within the market for clinical studies. As our products, in particular our key product, Epi proColon, and our product candidates, specifically Epi proColon Next-Gen, are not yet commercialized and still have to undergo reviews showing their proficiency, this might significantly delay the further development of marketable products as has already occurred as a result of COVID-19. Additionally, the issuance of reimbursement decisions by both public and private health payors for new products may be hampered by health insurers prioritizing funding for other medicinal products. The industry in which we operate is widely funded by public entities and states or government-affiliated institutions. Therefore, an economic downturn or recession, for example, due to COVID-19, that leads to an increase in public debt and/or declining government revenues, could have an adverse effect, for example, through the reduction of relevant funds,

ultimately resulting in, for example, lower reimbursement rates for our tests or higher thresholds for meeting coverage criteria by third-party payors.

1.1.5. Our commercial progress depends primarily on the sales of our Epi proColon test and we will need to generate significant revenue from this test to be profitable in the future. As a result of the recent denial of reimbursement coverage for Medicare patients, this may not be possible.

We have invested a significant portion of our efforts and financial resources in the development and regulatory approval of Epi proColon, and we are currently investing in its commercialization. We expect to derive substantially all of our revenue from the sales of Epi proColon for the foreseeable future, as our other products and product candidates are in early stages of development or must still be validated by additional clinical studies. Therefore, we will need to generate significant revenue from the Epi proColon test. To date, however, product revenue from Epi proColon has been relatively moderate. The success of Epi proColon will depend on several factors, many of which are outside of our control, including:

- Obtaining adequate reimbursement for Epi proColon, which depends in particular on the success of overturning the negative reimbursement decision by CMS or achieving legislation mandating Medicare coverage (see *1.1.3. "— Our success in commercializing Epi proColon and other (future) products depends in particular on reimbursement from government and health administration authorities, such as Medicare, or other third-party payors like private health insurers. As Medicare coverage for Epi proColon, our most important product, was recently denied, it is highly uncertain if and when such success will be achieved."*);
- The success of our efforts and those of our commercial partners in launching and commercializing Epi proColon in the United States;
- The ability to maintain regulatory approval for Epi proColon in the United States, including the successful completion of post-approval studies; and
- Acceptance of our products by the medical community at large.

If we do not achieve these objectives in a timely manner or at all, we may not be able to commercialize Epi proColon successfully, which would likely, among other things, have an adverse effect on our ability to ever reach the cash flow break-even point, particularly because we have prioritized Epi proColon over other products and product candidates.

1.1.6. The success of Epi proColon depends on its market acceptance by physicians, payors, Laboratory Customers, patients and others in the medical community. Our failure to gain such market acceptance may have an adverse effect on, among other things, our business and results of operations.

Epi proColon may not gain market acceptance from Laboratory Customers, physicians, patients, payors and others in the medical community in a timely manner or at all, which may adversely affect, among other things, our sales of Epi proColon and, thus, our revenue. The degree of market acceptance of Epi proColon depends on a number of factors, including:

- The availability of third-party coverage or reimbursement and the inclusion of Epi proColon in official guidelines, which are used by payors and health systems as decision-making factors for their payment determinations and thus, have a particularly great influence on reimbursement decisions and commercial adoption (see *1.1.3. "— Our success in commercializing Epi proColon and other (future) products depends in particular on reimbursement from government and health administration authorities, such as Medicare, or other third-party payors like private*

health insurers. As Medicare coverage for Epi proColon, our most important product, was recently denied, it is highly uncertain if and when such success will be achieved.");

- Its demonstrated clinical performance for detecting colorectal cancer;
- Its value and cost-effectiveness;
- Market acceptance of our test by Laboratory Customers, including acceptance of its value proposition;
- The availability of alternative screening methods and the preferences of governments, payors, health administration authorities, private health insurers and regulatory bodies regarding screening methods;
- The willingness of physicians to prescribe Epi proColon and its inclusion in laboratory offerings; and
- Its acceptance by the currently non-compliant target population.

The administration of clinical and economic utility studies is expensive and demands significant attention from certain members of our management team. In particular, the current COVID-19 pandemic may have significant implications on the successful execution of clinical studies, for example, due to a shift in focus and, thus, funds to the study of viral diseases or due to general complications caused by, for example, measures aimed at preventing or mitigating the further expansion of COVID-19.

Data collected from these studies may not be positive or consistent with our existing data or may not be statistically significant or compelling to the medical community. For example, a 2012 study we conducted to establish the non-inferiority of Epi proColon as to sensitivity (*i.e.*, the rate of false-negative test results, or missed actual cancer cases) when compared to fecal immunochemical tests ("**FIT**") found that Epi proColon was inferior to FIT with respect to specificity (*i.e.*, it exhibited a higher rate of false-positive test results, or positive test results in patients without cancer). Such higher rate of false-positive results could impair the acceptance of Epi proColon by the medical community and lead physicians, patients, payors, Laboratory Customers and others to favor other testing methods that exhibit greater specificity. Furthermore, if the results obtained from our ongoing or future studies are inconsistent with certain results obtained from our previous studies, acceptance of Epi proColon would suffer and our business would be harmed.

Peer-reviewed publications regarding our tests may be limited by many factors, including delays in the completion of, poor design of, or lack of compelling data from clinical studies, as well as delays in the review, acceptance and publication process. If our products or the technology underlying our current products or future products do not receive sufficient favorable exposure in peer-reviewed publications or the results are not accepted by relevant experts, the rate of clinician adoption of our products and reimbursement coverage decisions for our products could be negatively affected. The publication of clinical data in peer-reviewed journals and acceptance of the results in the medical community is a crucial step in commercializing and obtaining reimbursement for tests such as ours, and our inability to control when, if ever, results are published and how they are perceived may delay or limit our ability to derive sufficient revenue from our Epi proColon test.

1.1.7. Inadequate reimbursement rates or their redeterminations at a lower level may cause our revenue to be lower than initially expected.

Adequate reimbursement rates (*i.e.*, the amount paid by a third-party payor that does not need to be same as the selling price of the product or the price charged to patients) are crucial for the future success of commercializing our products, in particular our key product, Epi proColon, and our

product candidates, specifically Epi proColon Next-Gen. Even if our products were eventually covered by Medicare, price (re)determinations for *our products* at insufficient levels, could make our products significantly less attractive and Laboratory Customers, physicians, patients, payors and others in the medical community could make less use or no use of our products at all, having an adverse effect on our product sales. This is in particular true for the Medicare reimbursement rate as, according to our market observation, typically, the Medicare rate sets the industry benchmark and private payors (*i.e.*, private insurance companies) adopt this rate within a range of 80% - 120% with particularly private payors sometimes reimbursing below this range. Medicare reimbursement rates are subject to regular re-evaluation under the U.S. Protecting Access to Medicare Act and may be fixed at a substantially lower level than the initial rate of USD 192.00 effective since January 1, 2019 with other third-party payors likewise potentially lowering their reimbursement rate as a result.

1.1.8. If we are unable to attract and retain the members of our executive board and skilled personnel, we may be unable to execute our business strategy.

Our success depends to a significant extent on the skills, experience and efforts of the Company's executive board (the "**Executive Board**") and skilled personnel such as our research and development team. The loss of any or all of these individuals could harm our business and might significantly delay or prevent the achievement of our business objectives. For example, in January 2021, our former member of the Executive Board, Jorge Garces, Ph.D., who has extensive experience in molecular and cancer diagnostics, resigned from the Executive Board. Since February 1, 2021 and until December 31, 2021, Jorge Garces, Ph.D. will be serving the Company in a limited advisory role only. Loss of any key personnel is always associated with the risk of losing proprietary information and know-how specific to our technologies, especially if a former employee or member of the Executive Board should join one of our competitors, as was the case with Jorge Garces, Ph.D. This is particularly true as any non-competition clause contractually agreed upon with members of the Executive Board or key employees that is designed to prevent such situation might be invalid or unenforceable or ineffective for any other reason. There can be no assurance that we will be able to replace the experience and expertise of any leaving key personnel, and in particular of Jorge Garces, Ph.D, in a timely and satisfactory manner, which could limit, among other things, our ability to effectively manage our business operations or our research and development efforts and, hence, ultimately have an adverse effect on our business.

In addition, recruiting and retaining qualified personnel such as medical, regulatory and laboratory personnel will be critical to our success. However, in particular given the competition among numerous medical devices, pharmaceutical and biotechnology companies for similarly skilled personnel and the Group's unclear future prospects, we may not be able to attract and retain such personnel on acceptable terms, which could adversely affect our ability to compete effectively.

Moreover, even if we succeed in attracting and retaining our personnel, we might still experience staff shortages, in particular for our quality control testing, due to, among other things, shutdowns, high level of sick leave or quarantines caused by COVID-19 or other infectious diseases. In addition, the division of the Group's key personnel between the Federal Republic of Germany ("**Germany**") and the United States might cause insufficient communication or misunderstandings of local values, which might lead to, among other things, ineffective cooperation and might ultimately cause frustration or a lack of motivation among our key personnel, thus adversely affecting our business operations.

1.1.9. Certain of our products, such as HCCBloodTest, and product candidates, specifically Epi proColon Next-Gen, are still under development, and if clinical trials are prolonged, delayed or unsuccessful, we may be unable to commercialize these and future products and product candidates on a timely basis or at all.

Certain of our products, such as HCCBloodTest, as well as our product candidates, specifically Epi proColon Next-Gen, are in different stages of development prior to a potential commercialization in certain markets, in particular the United States. We may fail to successfully complete all prerequisites, *i.e.*, among other things, conduct clinical trials and obtain regulatory approvals, as well as secure intellectual property rights, for the commercialization of these as well as other future product candidates in a timely manner or at all, which would likely limit our ability to commercialize such products and, hence, could have an adverse effect on our revenue. To obtain the required regulatory approvals to market and sell future products, we must demonstrate through extensive clinical trials that our products are safe and effective in humans. While we achieved CE certification in Europe for HCCBloodTest in October 2018, the processes for obtaining governmental approval to market our products in other jurisdictions are rigorous, time-consuming and costly, and to achieve favorable reimbursement by healthcare payors, we may need to further optimize the product. It is impossible to predict the extent to which these processes may be affected by legislative and regulatory developments. Our product candidate, Epi proColon Next-Gen, is still in the early stages of its development and we anticipate that the realization of any necessary clinical trials and administrative proceeding to obtain regulatory approvals, for its commercialization would be costly and time-consuming. As we are currently focusing on commercializing of our key product, Epi proColon, in particular achieving Medicare coverage for Epi proColon, the progress in further developing our other products, product candidates and specifically Epi proColon Next-Gen hinges on the availability of appropriate additional financial resources.

The development of medical products, including our product candidates, specifically Epi proColon Next-Gen, involves a lengthy and expensive process with uncertain timelines and uncertain outcomes. Besides having to consider, among others, pre-existing third-party intellectual property rights, the process must be conducted in accordance with FDA regulations, European regulations and potentially other applicable regulatory authorities' legal requirements, regulations or guidelines, and are subject to oversight by these governmental agencies and institutional review boards at the medical institutions where the clinical trials are conducted. In addition, clinical trials must be conducted with supplies of our product candidates produced under current good manufacturing practices ("**cGMP**") and other requirements. The principles of cGMP, which are applicable to us, being a medical device manufacturer, are set forth in the FDA's Quality System Regulation (21 CFR Part 820).

In addition, we depend on collaborators to conduct our clinical trials and comply with Good Clinical Practice ("**GCP**") as set forth in the International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use harmonized tripartite guideline for good clinical practice E6(R1). To the extent our collaborators fail to enroll participants in our clinical trials, fail to conduct the clinical trials in accordance with GCP standards or encounter delays in the execution of clinical trials (for example, due to interruptions or limited resources caused by COVID-19 or other infectious diseases), we may be burdened with increased costs, program delays or both, which may harm our business. If the results of such clinical trials do not support the thesis underlying the product candidate or raise other significant concerns, the product candidate may fail altogether. In addition, we might encounter difficulties in procuring sufficient samples to conduct our clinical trials or finding suitable partners, who are willing to conduct such clinical trials with us, due

to, among other things, the limited availability of both samples and suitable partners as well as our limited financial resources compared to our competitors, which could therefore be preferred.

Due to these and other factors, our current and future products and product candidates, specifically Epi proColon Next-Gen, could take a significantly longer time to gain certain regulatory approvals than expected, may never gain certain regulatory approvals or may fail to reach market readiness for other reasons. This could delay or eliminate any potential product revenue from such products and product candidates.

1.1.10. Disruptions or delays in the supply of our diagnostic products, raw materials or other key components from our suppliers (some of which are single source suppliers), or in the manufacture of our products by our licensed manufacturer, or issues associated with their quality, could result in significant disruption to our business and sales.

We engage third parties to manufacture our diagnostic products, including our key product Epi proColon, as well as components of our diagnostic products in sufficient quantities and on a timely basis while maintaining the desired product quality, acceptable manufacturing costs and compliance with applicable regulatory requirements and quality standards. Only a few outside suppliers offer our diagnostic products and their components in desired qualities and quantities, and they may therefore be able to exercise significant pricing pressure on us, thereby having an adverse effect on our profit margin.

Reliance on third-party manufacturers entails significant risks which could ultimately have an material adverse effect on, among other things, our ability to supply our customers with our products. Such significant risks include for example:

- Manufacturing problems experienced by a supplier, including, among other things, due to shutdowns, border closures, supply problems or lack of personnel caused by infectious diseases like, for example, COVID-19;
- Regulatory compliance and quality assurance issues;
- Termination or non-renewal of manufacturing agreements with a supplier at times that are costly or inconvenient for us or material breaches of such agreements;
- The inability of a supplier to obtain required components in the desired quantities and qualities, including in the event of rapid changes in the demand for our products;
- The inability or failure to find alternative suppliers in the event of delays, unforeseen costs or discontinuation of sourced products; and
- Insolvency or bankruptcy of a supplier.

Given the highly regulated nature of our industry, changing third-party suppliers in our manufacturing process may create significant regulatory and economic burdens on the Group. Ahead of the market launch of Epi proColon in the United States, we implemented the manufacturing processes with a qualified alternative supplier capable of producing the test kits for us should our primary supplier experience production interruptions, but we may be unable to replace this alternative supplier (should our primary supplier fail) or other critical outside suppliers quickly, including both large multinational pharmaceutical companies and smaller specialized suppliers. These include, for example, the suppliers supplying us with magnetic beads and polymerase chain reaction reagents, both used in our Epi proColon test. Particularly, we may have difficulty replacing suppliers and manufacturers in the event an agreement is terminated, breached or cancelled for any reason. We

also rely on certain manufacturers, which have been approved by the FDA as manufacturers for our FDA-approved diagnostic product. If we lose any of our suppliers or manufacturing partners, we would incur the expense and time burden of identifying an appropriate supplier or manufacturer and, in case of certain manufacturers, obtaining FDA approval of the same and setting up an appropriate production process. If we are unable to replace manufacturing partners, we could be forced to manufacture our Epi proColon kits ourselves, which might be more costly than relying on third-party manufacturers, as we would need to establish our own production sites and maintain the facilities and qualified staff necessary to meet the required cGMP standards. Ultimately, any of the events described in this paragraph could result in significant disruption to our business and sales.

In addition, we rely on the availability to our Laboratory Customers of certain instruments produced by third parties that are used in performing the Epi proColon test. In most markets, the performance of the Epi proColon test is restricted to certain instruments specifically detailed in our regulatory filings. For example, in the United States, the FDA has approved the Epi proColon test for use on the 7500 Fast Dx platform produced by Life Technologies AS, Oslo, Norway ("**Life Technologies**"). Any changes in the offerings of laboratory instrument manufacturers might limit the ability of Laboratory Customers to use the Epi proColon product. Such a restriction would reduce demand for Epi proColon and, thus, have an adverse effect on our sales. We are currently in discussions with our supplier to evaluate and obtain FDA approval on the use of other polymerase chain reaction instruments for our Epi proColon test in the future, a process which might be time consuming, costly or may entirely fail.

1.2. Risks Related to the Industry in which we Operate

1.2.1. We operate in a highly competitive and rapidly changing industry, which may result in others creating more reliable diagnostic applications or more attractively priced products.

The molecular diagnostics industry is highly competitive and subject to significant and rapid technological change. Our success depends upon our ability to gain and keep sufficient market share by discovering, developing, obtaining marketing approval for, and successfully marketing new and innovative products that are more reliable and/or cost-effective than other products available in the market.

In doing so, we face and will continue to face intense competition from a variety of businesses, including large, fully integrated pharmaceutical and diagnostic companies, specialty diagnostic companies and biopharmaceutical companies, independent laboratories, academic institutions, government agencies and other private and public research institutions in the United States, Europe, and other jurisdictions. These organizations (*e.g.*, Roche, Bayer, Qiagen, BioMerieux, Exact Sciences Corp., or Sysmex) may have significantly greater resources than we do; and may conduct similar research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and marketing of products that compete with our products, in particular our key product, Epi proColon, and/or our product candidates. In addition, as it may take several years to overturn the non-coverage determination by CMS for Epi proColon (if ever) (see *1.1.3. "— Our success in commercializing Epi proColon and other (future) products depends in particular on reimbursement from government and health administration authorities, such as Medicare, or other third-party payors like private health insurers. As Medicare coverage for Epi proColon, our most important product, was recently denied, it is highly uncertain if and when such success will be achieved."*), these organizations might catch up with us and our advantage to offer the only FDA-approved, blood-based CRC screening test may be gone, which may have a material adverse effect on our sales of Epi proColon.

The colorectal cancer screening market has attracted competitors (*e.g.*, Abbott, Beckman Coulter or Siemens Healthineers), some of whom possess significantly greater financial and other resources and development capabilities than we do. Such greater resources might, among other things, give them an advantage over us in the competition for clinical trial partners. Some companies and institutions are developing serum-based tests and screening tests based on the detection of proteins, nucleic acids or the presence of fragments of mutated genes in the blood that are produced by colorectal cancer. We are aware of a number of companies that are actively engaged in the research and development of blood-based tests for the same, or similar, detection products as we are targeting. Specifically, Guardant Health, Inc., Freenome, Inc. and CellMax, Inc. are developing blood-based tests for the detection of colorectal cancer in the United States, utilizing a number of different approaches, including next generation sequencing ("**NGS**"), polymerase chain reaction ("**PCR**"), cell capture, imaging, proteomics, epigenomics and genomics. Additionally, Thrive Early Detection Corp. is developing a single blood test that screens for eight common cancer types. The test, called CancerSEEK, is a non-invasive test that simultaneously evaluates levels of eight common cancer proteins and the presence of cancer gene mutations from DNA circulating in the blood. Timing for FDA approval, reimbursement and commercialization of these tests is unclear. Certain competitors claim their respective trials may be completed by the end of 2021, however, it is unclear how long attaining FDA approval will take.

In addition, we are aware of several other companies that have expressed their intention to develop blood-based tests for the detection of colorectal cancer or have published initial research on new product developments, although to our knowledge, none of these companies have conducted the large-scale clinical trials for their blood-based tests that would be required to support a pre-market approval ("**PMA**") submission to the FDA for their products. The same applies for several entities that offer a laboratory-developed test ("**LDT**") version of a blood test for CRC detection, such as the BeScreened-CRC test developed by Beacon Biomedical Inc. and offered by Sonora Quest Laboratories. These tests are not FDA-approved and have limited data on their performance claims. As these competitors develop their product candidates, they may develop proprietary positions in certain areas that may have a material adverse effect on the competitiveness of our products. We may not comprehensively be aware of development of competing products or technologies and, therefore, there may be significant competing products or detection technologies in development of which we have no knowledge. Such unknowing could have a material adverse effect on our ability to respond to such new competing products or technologies in due time.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are more effective, safer, more convenient or less expensive than any products that we develop. Our competitors may also obtain approval by the FDA or comparable regulatory authorities, as well as positive reimbursement decisions by CMS or other institutions, for their products more rapidly than we obtain for ours, which could delay commercialization of our products or result in our competitors establishing a strong market position before we are able to enter the market. Our products, in particular our key product, Epi proColon, and product candidates may be priced at a significant premium over competitive products if any have been approved by then, resulting in reduced competitiveness of our products. In addition, any change in the regulatory landscape that would make it easier for competitors to develop and commercialize LDTs or homebrew assays being competitive against PMA approved products such as Epi proColon would also pose a risk for our competitive position.

We also face competition from procedure-based detection technologies, such as colonoscopy and colonography (a radiological imaging approach which visualizes the inside of the bowel by use of spiral computerized axial tomography known as a CT scan), as well as existing and possibly improved traditional screening tests, such as fecal occult blood tests, and FIT or stool DNA tests or

for example improved ultrasound techniques. One example is the use of capsule endoscopy, which uses a tiny vitamin-size wireless camera to capture images of the digestive tract. Medtronic plc has commercialized the PillCam Colon system for polyp detection in certain high-risk individuals. It is not intended currently for CRC screening among average risk patients. Our competitors may also be working on additional methods of detecting colorectal cancer that have not yet been announced. We may be unable to compete effectively against these competitors either because their test is superior or because they may have more expertise, experience, financial resources or stronger business relationships.

1.2.2. Because cancer screening (*i.e.*, preventive medical examination) is voluntary, acceptance of our products depends on the willingness of patients to be screened, which is outside of our control.

Because cancer screening (*i.e.*, preventive medical examination) is voluntary, we depend on patients opting for a colorectal cancer screening with our Epi proColon product or for other cancer screening with our other current and future products. Even if our Epi proColon test gains acceptance by physicians, payors, Laboratory Customers and others in the medical community, adequate third-party reimbursement is obtained and medical practitioners order our Epi proColon product, only a small number of patients may decide to be screened for colorectal cancer. In addition, the patients that decide to undergo colorectal cancer screening may opt for a screening method other than our blood-based Epi proColon product.

Despite the availability of colorectal cancer screening methods and the recommendations of the U.S. Preventive Services Task Force ("**USPSTF**", an independent panel of primary care physicians and epidemiologists specializing in primary care and prevention, staffed and funded by the U.S. Department of Health and Human Services' Agency for Healthcare Research and Quality, that systematically reviews and provides recommendations for clinical preventative services) that all Americans aged 45 to 75 be screened for colorectal cancer (source: USPSTF Recommendation Summary, dated May 18, 2021, available at https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/colorectal-cancer-screening), we estimate that approximately one third of individuals above the age of 65 (making them eligible for Medicare) are not being screened in accordance with current American Cancer Society ("**ACS**") guidelines (based on American Cancer Society, "Colorectal Cancer Facts & Figures 2020-2022", available at https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/colorectal-cancer-facts-and-figures/colorectal-cancer-facts-and-figures-2020-2022.pdf). The success of our Epi proColon test depends on an increasing willingness of patients to undergo colorectal cancer screening.

The risk of insufficient acceptance by patients undergoing screening using our test methods is not unique to our key product Epi proColon but also applies to any other test, including our blood test ("**HCCBloodTest**") for the identification of hepatocellular carcinoma ("**HCC**"), the most common form of liver cancer, in patients diagnosed with liver cirrhosis and our blood-based test to assist in the detection of lung cancer in blood plasma ("**Epi proLung**"), as well as any test that we may develop and market in the future.

If the acceptance of our products drops, it could have, among other things, a material adverse effect on our product sales.

1.2.3. Demand for cancer molecular in vitro diagnostic tests may not grow or may fail to grow significantly.

Our business strategy and assumptions rely on strong growth forecasts for the demand for in vitro diagnostic ("**IVD**") tests. For instance, Grand View Research predicts that the market for molecular

diagnostics will grow at a compound annual growth rate of 9.0% per year from 2020 to 2027, (source: http://www.grandviewresearch.com/industry-analysis/molecular-diagnostics-market). However, this market is still evolving and may fail to grow or may grow more slowly than expected.

In addition, even if the market does grow, physicians and Laboratory Customers may not recommend and order Epi proColon and our other IVD products or we might not have enough products on stock to cover any non-forecasted orders. In addition, market growth might lead to increased competition and decreasing prices resulting from this competition. As a result, market growth might be over-compensated by price decrease.

Any slower than anticipated increase, or even decrease, in the demand for cancer molecular in vitro diagnostic tests, could have an adverse effect on the quantity of tests we sell and, thus, on our revenue.

1.2.4. Any commercialization of our products depends on our ability to enter into, and successfully execute, sale and other agreements with our potential customers and partners as our industry, particularly in the United States, relies on few major players on the demand side.

According to our market observations, a limited number of Laboratory Customers account for a large share of the relevant U.S. market on which we plan to focus. Hence, in case we succeed in bringing a test to market and procure the necessary approvals and adequate reimbursement, we expect to sell such test only to a limited number of customers. Failure to enter into, and successfully execute agreements with such customers could, among other things, adversely affect our ability to sell our products in large quantities.

Such a high concentration of customers will likely expose us to certain risks. When relying on only few customers for large portions of sales, collecting on accounts receivable, in particular in a timely manner, is especially important to generate cash flows and prevent liquidity issues. In the past, we have not always received outstanding amounts when due, forcing us to expend extra effort on collection. Such situations could have an adverse effect on our liquidity. Furthermore, a high concentration of customers entails certain other risks. For example, their non-compliance with the terms of any agreements with us or the termination or non-renewal of such agreements (in part or in total), any (legal) disputes with them, or the misuse of intellectual property or proprietary information by them could, among other things, have a significant adverse effect on sales of our products. In addition, individual customers accounting for large portions of our sales might use their resulting relative market power to, among other things, try to negotiate better conditions for them.

In addition, we also rely on other partners, for instance a logistics partner, to store and ship our products and product components, which exposes us to further operational risks. For example, in the past, we had to replace our central logistics provider in Germany after that provider terminated its service agreement with us. Any cost increases for logistics services, disputes or other problems arising out of our relationship with logistics providers or difficulties in replacing a logistics partner could, among other things, adversely affect our supply chain and particularly endanger the availability of our products.

1.2.5. Particularly because we are active in an industry that manufactures products for the medical field, we may be exposed to warranty and product liability claims for our products.

The sale and use of any of our products, including our key product, Epi proColon, or any of our product components could lead to warranty or product liability claims based on allegations that the product contained a design or manufacturing defect or our laboratory was negligent in processing

test results which resulted in the failure to detect the disease for which it was designed. In addition, we may face product liability claims with respect to our products even if a third party, for example, one of our distribution or manufacturing collaborators, is responsible for the defect in the respective product. We have no direct control over such collaborators and therefore limited ability to ensure that they maintain proper quality standards.

Product liability or warranty claims could result in substantial damages and be costly and time-consuming to defend, either of which could adversely affect our business or financial position. There can be no assurance that our liability insurance would protect our assets from the financial impact of defending a liability claim. Any claim brought against us, with or without merit, could increase our liability insurance rates or prevent us from securing insurance coverage in the future. Furthermore, any such claim could also negatively impact the public's perception of us and our products and therefore the willingness of end customers to use them.

1.2.6. Negative media cover, public scrutiny, or adverse events in our business or in the field of molecular diagnostics or IVD testing may damage public perception of the Industry we operate in and of our key product, Epi proColon, our other products or product candidates.

We may be subject to a reduction in consumer demand and potential regulatory changes that might arise from negative public perceptions of us or our industry.

The commercial success of our key product, Epi proColon, our other products and product candidates depends to a great extent on our reputation, but also in part on public perception and acceptance of molecular diagnostics and IVD testing in general. Such perceptions are subject to various risks, many of which are outside of our control. Adverse events in clinical trials of our products or product candidates, or in clinical trials conducted by others developing similar products, and the resulting publicity could result in a decrease in demand for Epi proColon or other products that we develop. For example, in the past, several cervical cancer patients died in Ireland after having received false negatives on their pap tests (Papanicolaou-tests use cervical screening for early detection of cervical cancer risk). Instances such as these may cause general public distrust towards other early cancer detection methods, in particular those relying on laboratory work. If public perception is influenced by claims that IVD testing is unsafe or inaccurate, our products may not be accepted by the general public or the medical community.

Furthermore, warranty and product liability claims or failure to comply with applicable regulations could result in negative publicity and damage our reputation. In particular, due to our high reliance on collaborators such as our distribution, supply, and manufacturing partners, any product defects or regulatory non-compliance by such third-party collaborators, over which we have limited control, could subject us to such claims and negative publicity, which could adversely impact our reputation and, hence, ultimately have an adverse effect on our product sales.

Future adverse events in our industry could also result in greater governmental regulation, stricter labeling requirements and potential regulatory delays in the testing or approvals of our products. Any increased scrutiny could delay the process or increase the costs of obtaining regulatory approval for our product candidates.

1.3. Risks Related to Intellectual Property

1.3.1. Our success depends on obtaining, maintaining and enforcing patents and other intellectual property rights relating to our technologies, products and product candidates. If we are unable to protect such intellectual property rights, we may not be able to compete effectively as, for example, we could lose our ability to prevent others from utilizing our technologies or commercializing products similar or identical to ours without payment to us.

Our success depends on obtaining, maintaining and enforcing patents and other intellectual property rights relating to our technologies, products and product candidates. We will only be able to protect our technologies and products from unauthorized use by third parties to the extent that they are covered by valid and enforceable patents or other proprietary rights. We rely on patent protection to prevent competitors from launching competing products based on our biomarkers and technologies. Since, over recent years, we have moved our business from only developing new products to also marketing and selling our existing product and product components, patent protection is now even more important to prevent competitors from launching competitive products based on our biomarkers. Should any patent rights expire or become invalidated in a particular market, it may be difficult for us to find commercial partners that would be willing to enter into a licensing or similar agreement with us. Hence, any difficulties we face in maintaining and enforcing our patents and other intellectual property rights may have a material adverse effect on our ability to compete effectively.

Our patents and patent applications may not contain claims that are sufficiently broad to prevent others from using our technologies or developing competing products. In addition, the issuance of a patent is not conclusive of its validity or enforceability. The patents on which we rely may also be challenged and invalidated, including by competitors, and our patent applications may not result in issued patents.

For example, following a request for invalidation by Jiangsu Weizhen Biomedical Technology, Inc. ("**Weizhen**"), on July 15, 2019, the Reexamination and Invalidation Department of the China National Intellectual Property Administration ("**CNIPA**") deemed our Septin9 patent in China partially invalid. Pursuant to the decision, our Epi proColon 2.0 CE and HCCBloodTest products are no longer patent-protected in China. We filed an appeal against the decision on October 10, 2019, but reversal of the decision could take several years (if ever).

If third parties successfully challenge the validity, ownership, or enforceability of our owned or licensed patents, we may lose important patent protection relating to our technologies, products, and product candidates, and we could lose our ability to prevent others from utilizing these technologies or commercializing products similar or identical to ours without payment to us, which might have a material adverse effect on our ability to commercialize our products and product candidates and may ultimately result in substantial damage to our business. In the past, we have also agreed to sell some intellectual property rights as a result of a settlement of an intellectual property dispute. If the outcome of litigation or other proceedings relating to our intellectual property position is adverse to us, third parties may be able to use our technologies and develop products similar or identical to ours without payments to us.

In particular, the laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of Germany and the U.S. We may not obtain patent rights in all countries in which we file patent applications. For example, we currently do not have patent protection for our SHOX2 and PTGER4 technology in China, though we have a pending application covering the composition of matter for SHOX2 and PTGER4 technology in China. Although a patent of that family has been

granted in the United States, such patent application in China may not result in patents being issued, which may limit our ability to protect our products, in particular our key product, Epi proColon, as well as our product candidates, specifically Epi proColon Next-Gen, and technology. Even if we obtain patent rights in China and other foreign jurisdictions, we may encounter significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. For example, the legal systems of some countries, particularly China, do not favor the enforcement of patents and other intellectual property protection, especially those relating to life sciences. In addition, due to the complexity, size and other factors such as language barriers in markets such as China, the process of defending our rights and rejecting and prosecuting an infringer may prove drawn-out and costly. This could make it difficult for us to stop the infringement of our patents or the misappropriation of our other intellectual property rights.

In addition, many countries have compulsory licensing laws under which a patent owner must grant licenses to third parties. Some countries also limit the enforceability of patents against third parties, including government agencies or government contractors. In these countries, patents may provide limited or no benefit, which may have a material adverse effect on our commercialization activities in such countries and thus on our product sales.

Proceedings to enforce our patent rights have resulted, and might result in the future, in substantial costs and might divert our management's attention and resources from other aspects of our business. Our efforts to protect our intellectual property rights may be inadequate and thus result in delays in, or the prevention of, the commercialization of our products. In addition, changes in the law and legal decisions by courts in Germany, the United States, China and other countries may affect our ability to obtain adequate protection for our technology and the enforcement of intellectual property.

1.3.2. Changes in patent laws and their interpretation, in particular in the United States, make it difficult to predict how patents will be issued or enforced in our industry, as well as making it similarly difficult to ensure protection of our intellectual property rights, thereby hindering our ability to compete effectively.

As our success depends on obtaining, maintaining and enforcing patents and other intellectual property rights relating to our technologies, products and product candidates, patent laws and their interpretation in the United States and other countries are of great significance to us.

There have been numerous changes to the patent laws and proposed changes to the rules of the United States Patent and Trademark Office (the "**USPTO**"), which may have a significant impact on our ability to protect our technology and enforce our intellectual property rights. For example, the Leahy-Smith America Invents Act, which was signed into law in 2011, includes a transition of the U.S. patent system from a "first-to-invent" system to a "first-inventor-to-file" system, and also changes the way issued patents are challenged. Certain changes, such as the institution of *inter partes* review proceedings, only came into effect in 2012. Substantive changes to patent law associated with the America Invents Act may affect our ability to obtain patents, and, if obtained, to enforce or defend them in litigation or *inter partes* review or other administrative proceedings, all of which could harm our business.

Two cases involving diagnostic method claims and "gene patents" have been decided by the Supreme Court of the United States. In March 2012, the Supreme Court issued a decision in Mayo Collaborative Services v. Prometheus Laboratories, Inc. ("**Prometheus**"), a case involving patent claims directed to measuring a metabolic product in a patient to optimize a drug dosage amount for the patient. According to the Supreme Court, the addition of well-understood, routine or conventional

activity such as “administering” or “determining” steps was not enough to transform an otherwise patent ineligible law of nature into patent eligible subject matter.

In June 2013, the Supreme Court issued its decision in Association for Molecular Pathology v. Myriad Genetics, Inc. (“**Myriad**”), a case involving patent claims held by Myriad Genetics, Inc. relating to the breast cancer susceptibility genes BRCA1 and BRCA2. Myriad held that isolated segments of naturally occurring DNA, such as the DNA constituting the BRCA1 and BRCA2 genes, is not patent-eligible subject matter, but that cDNA, which is an artificial construct that is complementary to RNA transcripts of genes, may be patent eligible.

On December 16, 2014, the USPTO issued interim guidance, entitled “2014 Interim Guidance on Patent Subject Matter Eligibility”, which is for use by USPTO personnel in examining patent claims reciting judicially recognized exceptions to patentable subject matter, including laws of nature, natural phenomena, or abstract ideas, for patent eligibility in view of the Supreme Court decisions in Prometheus, Myriad, and Alice Corporation Pty. Ltd. v. CLS Bank International. The guidance indicates that claims reciting a judicial exception to patent-eligible subject matter must amount to significantly more than the judicial exception itself in order to be patent-eligible subject matter. There can be no assurance that our efforts to seek patent protection for our technology and products will not be negatively impacted by the decisions described above, rulings in other cases or changes in guidance or procedures issued by the USPTO. On May 5, 2016, the USPTO published updated guidance to include two new examples relating to diagnostic methods and two new examples relating to “nature-based” products. The new guidance adds Examples 28-33 to the USPTO’s body of patent eligibility examples, of which Examples 29 and 31 relate to diagnostic methods. Example 31 relates to screening for genetic markers, and is based loosely on the claims of Myriad’s U.S. Patent 5,753,441. Out of the five sample claims, four are said to be “eligible” and one is said to be “ineligible”. These examples, while instructive, do not necessarily ensure that the courts will concur with the USPTO’s analysis.

Two additional cases involving diagnostic method claims have been decided by the U.S. Court of Appeals for the Federal Circuit. On December 17, 2014, the Federal Circuit issued its decision in In re BRCA1- and BRCA2-Based Heredity Cancer Test Patent Litigation (“**Myriad II**”). In this case, the Federal Circuit held that requiring physical transformations including hybridizing a probe, amplification of DNA or sequencing of DNA was not sufficient to render the claims in question patent eligible. On June 12, 2015, the Federal Circuit issued its decision in Ariosa Diagnostics, Inc. v. Sequenom, Inc. (“**Ariosa**”). The claims at issue in this case encompassed using maternally isolated cell free fetal DNA (“**cffDNA**”), to determine characteristics of the fetus like gender and the presence of genetic disorders such as down syndrome. In Ariosa, the Federal Circuit held that because the cffDNA existed in nature and the other steps of the claimed methods were well-understood and routine in the relevant scientific field, the claims were not patent eligible.

We cannot fully predict what impact the Supreme Court’s decisions in Prometheus and Myriad and the Federal Circuit’s decisions in Myriad II and Ariosa may have on the ability of molecular diagnostic companies or other entities to obtain or enforce patents relating to diagnostic methods or isolated products of nature in the future.

We believe our technology may be differentiated from that at issue in the above cases because the diagnostic method claims contained in our patents and patent applications are directed at the analysis of bisulfite-converted DNA rather than naturally occurring genomic DNA. We also believe that the oligonucleotides used in the amplification of bisulfite-converted genomic DNA and in the detection of methylation status are not covered by the judicially recognized exceptions to patent eligible subject matter established in Myriad, since the nucleotide sequences of these oligonucleotides are different from sequences occurring in nature. However, methods of detecting a

disease based upon the presence of a genomic marker may not be patent eligible, unless there are elements added to the claim which amount to significantly more than the correlation itself. The full impact of the Supreme Court's decisions is not yet known and they have created uncertainty around the patentability of certain claims contained in certain of our issued patents and pending patent applications. The claims of our patent applications may therefore fail to issue, or if they do issue, may, along with the claims of our issued patents, subsequently be challenged or invalidated, on the grounds that they include subject matter that is not patent eligible based on the Supreme Court's rulings in these cases and the further evolution of case law in this area.

Any such changes in the patent laws or their interpretation in the United States and other countries, could result in changes in the scope of protection of our intellectual property, including licensed intellectual property, or its enforceability. This may have a material adverse effect on our ability to protect our technology and enforce our intellectual property rights, thereby hindering our ability to compete effectively and exposing us to a greater risk of direct competition.

1.3.3. We may infringe intellectual property rights of third parties and become subject to expensive litigation for actual or alleged such infringements.

Our research, development and commercialization activities, including our current proprietary tests and product candidates, as well as any other tests resulting from these activities, may infringe, or be alleged to infringe, patents, trademarks or other intellectual property rights owned by other parties. Resulting third-party patent claims and actual or threatened litigation could incur us significant costs and may lead to restrictions on our products, in particular our key product, Epi proColon, and our product candidates and, thus, have an adverse effect on our ability to compete effectively.

Certain of our competitors and other companies in the industry have substantial patent portfolios, and may attempt to use patent litigation as a means to obtain a competitive advantage. In addition, some of our competitors may be able to sustain the costs of complex patent disputes and litigation more effectively than we can because they have substantially greater resources. We may become a target of such litigation. The risks of being involved in such litigation may increase as we move into new markets and applications for our tests. There may also be patents and patent applications that are relevant to our technologies or tests that we are not aware of, but which could be asserted against us. Claims brought by third parties against us could cause us to incur substantial expenses and, if the claims are successful, pay substantial damages, including treble damages and attorneys' fees. We could also be forced to stop or delay research, development, sales or our commercialization efforts of the test that is the subject of an intellectual property infringement suit. The defense of such suit, even if the claim proofs to be unfounded, could divert the attention of our management and technical personnel.

As a result of infringement claims, or in order to avoid potential claims, we may choose or be compelled to seek intellectual property licenses from third parties. These licenses may not be available on acceptable terms, or at all. Even if we are able to obtain a license, the license would likely obligate us to pay license fees or royalties or both, and the rights granted to us would likely be non-exclusive, which would mean that our competitors could also obtain licenses to the same intellectual property. Ultimately, we could be prevented from commercializing a test or be forced to cease some aspect of our business operations, if, as a result of actual or threatened infringement claims, we are unable to enter into licenses of the relevant intellectual property on acceptable terms. Further, if we attempt to modify our tests or to develop alternative methods or products in response to infringement claims or to avoid potential claims, we could incur substantial costs, encounter delays in product introductions or interruptions in test sales, and such attempts may not be successful or result in tests with inferior characteristics compared to our original test.

1.3.4. Obtaining and maintaining patent protection depends on compliance with various requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

The USPTO and various other patent offices require compliance with a number of procedural, documentary, fee payment and other similar provisions. In addition, periodic maintenance fees on our owned and in-licensed patents are due to be paid to governmental patent agencies over the lifetime of the patents. Future maintenance fees will also need to be paid on any other patents that may be issued to us. We have systems in place in which these fees are automatically paid through an outside firm unless we instruct them to the contrary. In certain cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. This might have an adverse effect on our competitive position in the respective market.

1.3.5. If we are unable to adequately protect the confidentiality of our trade secrets, other proprietary information, or our trademarks and trade names, our business and competitive position may be harmed.

We rely on confidential proprietary information, including trade secrets and know-how, to develop and maintain our competitive position. We seek to protect our confidential proprietary information, in part, by entering into confidentiality agreements with our employees, consultants, collaborators and others upon the commencement of their relationships with us. However, we may not obtain these agreements in all circumstances, and individuals with whom we have these agreements may not comply with their terms. Thus, despite such agreements, our inventions may become assigned to third parties. In the event of unauthorized use or disclosure of our trade secrets or proprietary information, these agreements, even if obtained, may not provide meaningful protection, particularly for our trade secrets or other confidential information. To the extent that our employees, consultants or contractors use technology or know-how owned by third parties in their work for us, disputes may arise between us and those third parties as to the rights in related inventions.

The EU Directive 2016/943 on the protection of undisclosed know-how and business information, which has been implemented in Germany through the Act on the Protection of Trade Secrets of April 26, 2019 (*Geschäftsgeheimnisgesetz*), obligates companies to put in place reasonable measures for the protection of their trade secrets. However, it may be beyond our control, to take all necessary steps and precaution measures to ensure that no third-party, such as our competitors and potential competitors, gain access to proprietary information and know-how specific to our technologies, for example, because our e-mails are handled by an external provider and we have limited control over such provider's operations.

We may also employ individuals who were previously or are concurrently employed at research institutions and/or other medical device companies, including our competitors or potential competitors. We may be subject to claims that these employees, or we, have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers, or that patents and applications we have filed to protect inventions of these employees, even those related to one or more of our products, are rightfully owned by their former or concurrent employer. Vice versa, our competitors and potential competitors may seek to hire our employees who have proprietary information and know-how specific to our technologies. Such a departure by one of our key employees could lead to unauthorized use of our proprietary information by or disclosure of our trade secrets to our competitors, in which case adequate remedies may not exist.

We also use a variety of registered and unregistered trademarks, as well as trade names that may play an important role in the commercialization of our (future) products. However, they may be challenged, infringed, circumvented, declared generic or determined to be infringing on other marks or names. There is no guarantee that we will be able to secure registration for any of our pending or future applications to register a trademark with the USPTO or comparable authorities. If we are unable to establish name recognition based on our trademarks and trade names or have to change our name or the name of any product we may not be able to compete effectively or experience customer confusion.

With regard to our trade secrets, other proprietary information, our trademarks and trade names, costly and time-consuming litigation or other proceedings (such as, for example, at the USPTO or other trademark authorities) could be necessary to defend against any claims or to enforce or determine the scope of our rights. Even if we are successful in defending against a claim, litigation could adversely affect our business by resulting in substantial costs and be a distraction to management.

1.3.6. Under German law, employee inventors may own or co-own their inventions and intellectual property rights and may be entitled to receive compensation.

Our agreements with employees and our personnel policies generally provide that any inventions conceived by the individual in the course of rendering services to us shall be our exclusive property. However, many of our employees, particularly of those working in research and development, work in Germany and are subject to German employment law.

Ideas, developments, discoveries and inventions made by such employees are subject to the provisions of the German Act on Employees' Inventions (*Arbeitnehmererfindungsgesetz*), which regulates the ownership of, and compensation for, inventions made by employees. We face the risk of disputes between us and our current, former or future employees in Germany under this act pertaining to the ownership rights to inventions or the sufficiency of compensation paid by us to such employees. If, under the provisions of the act, an employee inventor retained sole ownership or co-ownership of any inventions or related intellectual property rights, we may lose valuable intellectual property rights (including to competitors) and may be required to obtain and maintain licenses from such employee inventors to such inventions or intellectual property rights in order to continue our operations, which may not be possible on commercially reasonable terms or at all. Employee inventors might also claim that the compensation we paid to them was insufficient, and we may be required to increase such compensation or pay damages for the use of the invention, which may have an adverse effect on our liquidity as it may result in additional expenses.

1.4. Regulatory Compliance Risks

1.4.1. Our products, including our key product Epi proColon, as well as our product candidates and the Group are subject to continuing regulatory review and regulatory requirements such as post-approval studies which if not effectively approved or conducted, respectively, could result in us losing approvals, and thereby, our ability to market such products.

We and our products, including our key product Epi proColon, as well as our product candidates are subject to continuing regulatory review, and granted marketing authorizations (such as the FDA approval for Epi proColon) can be withdrawn or restricted on its basis. Ongoing obligations subject to oversight by regulatory authorities in the United States and elsewhere include post-approval studies, adverse event reporting requirements, marketing restrictions and, potentially, other post-marketing obligations, all of which may result in significant expense and limit our ability to

commercialize such products. In addition, any modifications affecting the safety or effectiveness of a product may require new regulatory clearances or PMA, or may require us to cease marketing or recall the modified product until such clearances are obtained, thus having a material adverse effect on our product sales and public perception.

In particular, the FDA has required that we perform a post-approval study for our Epi proColon test. We commenced this study in the fourth quarter of 2016 and expect the study to run through 2022 subject to delays caused by COVID-19 (see *1.1.4. "— Risks Related to our Business — COVID-19 has, and continues to, negatively affect segments of the global economy and has similarly negatively affected our operations, including, among other things, interrupting our supply chain, clinical trials and commercialization activities, as well as, delaying approvals and reimbursement decisions and may continue to do so* in the foreseeable future*")*. We are required to submit post-approval study reports to the FDA for every six months during the first two years of the study, and annually thereafter. The post-approval study can be expected to result in significant costs as we plan to enroll approximately 4,500 patients across multiple study centers in the United States over the next years. If we are unable to meet the agreed parameters of the study or fail to comply with the FDA's reporting obligations, our FDA approval for Epi proColon may be withdrawn or restricted. The success of our key product Epi proColon, and any other products or product candidates that we may develop, could be material adversely affected by costs of this or similar required studies and regulatory compliance even after approval by a regulator such as the FDA.

We cannot determine with certainty the duration and completion costs of future clinical trials of our products or product candidates, specifically Epi proColon Next-Gen. We may never succeed in achieving regulatory approval for any of our future products or product candidates. The duration, costs and timing of clinical trials and development of our future products or product candidates will depend on a variety of factors, including:

- The scope, rate of progress and expense of our ongoing and any additional non-clinical studies, clinical trials and other research and development activities;
- Clinical trial and early-stage results; and
- The terms and timing of regulatory approvals.

In addition, in connection with the renegotiation of our joint commercialization agreement with Polymedco in 2018, we have taken over certain sales responsibilities for Epi proColon, including product storage and distribution in the United States. Due to the nature of the goods stored and distributed, these activities require a number of specific permits and approvals by the State of California and the FDA, and while we believe that we have complied with all applicable requirements, this may not be the case, in particular given our lack of previous experience in performing these activities.

We may also be subject to regulatory approval requirements for each jurisdiction in which we sell our tests. Therefore, our future performance depends on, among other matters, the timely receipt of necessary regulatory approvals for our products and product candidates. Regulatory approval can be a lengthy, expensive and uncertain process. In addition, regulatory processes are subject to change, and new or changed regulations can result in increased costs and unanticipated delays. Any changes in foreign approval requirements and processes may cause us to incur additional costs or lengthen review times of our tests. We may also not be able to obtain foreign regulatory approvals in a timely manner, if at all, and any failure to do so may cause us to incur additional costs or prevent us from marketing our tests in foreign countries, which may have a material adverse effect on our business.

If there are legislative or regulatory changes in the application of legislation or regulatory policies, or if problems are discovered with a product or the manufacture of a product, or if we or one of our distributors, licensees, co-marketers or other collaborators and partners fail to comply with regulatory requirements, regulators could also take various actions. These include imposing fines on us, imposing restrictions on the product or its manufacture, and/or requiring us to recall or remove the product from the market. Regulators could also suspend or withdraw our marketing authorizations or require us to conduct additional clinical trials, change our product labeling, or submit additional applications for marketing authorization.

1.4.2. Enacted and future legislation and regulation, or new interpretations thereof, may increase the difficulty and cost for us to obtain marketing approval of and commercialize our products, in particular our key product Epi proColon, and product candidates.

Future legislation and regulation, or new interpretations thereof, whether in North America, Europe (including in particular, potentially diverging legislation regarding healthcare in the United Kingdom of Great Britain and Northern Ireland (the "**United Kingdom**") and the European Union ("**EU**") as a result of the United Kingdom's departure from the EU) or elsewhere, may increase the difficulty and cost for us to obtain relevant marketing approval and commercialize our products, in particular our key product, Epi proColon, and product candidates which could have a material adverse effect on our product sales.

In the United States, the EU and some other foreign jurisdictions, there have been a number of legislative and regulatory changes, and proposed changes, regarding the healthcare system. These changes could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any products for which we obtain marketing approval.

It is likely that federal and state legislatures in the United States and other national governments will continue to consider changes to existing healthcare legislation. We cannot predict the reform initiatives that may be adopted in the future or whether initiatives that have been adopted will be repealed or modified. The continuing efforts of governments, insurance companies, managed care organizations and other payors of healthcare services, to contain or reduce costs of healthcare may material adversely affect:

- The demand for any products for which we may obtain regulatory approval;
- Our ability to set a price that we believe is fair for our products;
- Our ability to obtain coverage and reimbursement approval for a product;
- Our ability to generate revenue and achieve or maintain profitability; and
- The level of taxes that we are required to pay.

Additionally, in the United States, other legislative changes have been proposed and adopted since the 2010 passage of the ACA. The Budget Control Act of 2011, as amended, (the "**Budget Control Act**"), includes provisions intended to reduce the federal deficit. The Budget Control Act resulted in the imposition of 2% reductions in Medicare payments to providers beginning in 2013 and subsequent legislation extended the reductions through to 2023. Any significant spending reductions affecting Medicare, Medicaid or other publicly funded or subsidized healthcare programs that may be implemented, or any significant taxes or fees that may be imposed on us as part of any broader deficit reduction effort or legislative replacement to the Budget Control Act, could have a material adverse impact on our anticipated product revenue. Both in the United States and in the EU,

legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for diagnostic products. There is an increased risk that, among other things, due to the additional stress COVID-19 has placed and may further place on public spending and health systems, additional legislative changes may be enacted, or that the regulations, guidance or interpretations may be changed, and it is uncertain what the impact of such changes on the approvals, commercialization and marketing of our products, in particular our key product, Epi proColon, and product candidates may be. Increased scrutiny by U.S. Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing testing and other requirements in the United States.

In addition to potential legislative changes in the United States, the regulatory environment in cancer molecular diagnostics is complex. For example, the U.S. regulatory landscape is affected by numerous entities including the FDA, CMS, USPSTF, and U.S. Congress. New or modified regulations by any of these entities could have a material impact on our business.

1.4.3. Our products, in particular our key product, Epi proColon, are subject to continuing quality inspections, which if not passed, may cause, among other things, significant production delays or substantial additional expenses.

Under the medical device regulations in the United States, the FDA regulates quality control and manufacturing procedures by requiring us to demonstrate and maintain compliance with the Quality System Regulation, which sets forth the FDA's cGMP requirements for medical devices. The FDA monitors compliance by conducting periodic inspections of manufacturing facilities, which are typically unannounced.

For example, the FDA is permitted to inspect our facilities as well as the manufacturing facilities of our suppliers or any third party where our products are assembled. Although we audit our suppliers' and manufacturers' facilities, our suppliers and manufacturers are not under our direct control. If the FDA determines we or any of our suppliers or manufacturers have violated the applicable regulations and have not complied with warnings provided by the FDA after an inspection, or if we or our suppliers or manufacturers are unable or delayed, for any reason, to cause the operations to comply with the applicable regulations, the inspected facility may ultimately be closed, and, as a result, we may incur significant delays and substantial additional expenses in our production and continued marketing of our products. In addition, in the event of product defects or regulatory non-compliance by us or our collaborators and other partners, we may be exposed to warranty and product liability claims.

If we fail to pass any quality inspections or fail to comply with other similar regulatory requirements, it may have an adverse effect on, among other things, our manufacturing which could result in significant production delays or substantial additional expenses.

1.4.4. Our business is subject to complex U.S. federal, U.S. state, German and other national healthcare laws, including fraud and abuse, anti-kickbacks, health information privacy and security laws. We and our collaborators could face substantial penalties for failure to comply with these regulations.

We and our collaborators are subject to various U.S. federal and U.S. state healthcare laws, including:

- The U.S. federal Anti-Kickback Law, which constrains, among other things, our marketing practices, educational programs, pricing policies and relationships with healthcare providers or other entities, by prohibiting, among other things, soliciting, receiving, offering or paying

remuneration, directly or indirectly, to induce or reward, or in return for, either the referral of an individual or the purchase, lease, ordering or recommendation of any good, facility, item or service reimbursable under a U.S. federal healthcare program, such as the Medicare and Medicaid programs;

- U.S. federal civil and criminal false claims laws and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid or other U.S. federal healthcare programs that are false or fraudulent;
- U.S. federal criminal statutes, created by the U.S. Health Insurance Portability and Accountability Act ("**HIPAA**"), that prohibit, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or knowingly and willfully making any materially false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, also known as the HITECH Act, and its implementing regulations, which imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information;
- The U.S. federal physician self-referral law, commonly known as the Stark Law, which prohibits a physician from making a referral to an entity for certain designated health services reimbursed by Medicare or Medicaid if the physician or a member of the physician's family has a financial relationship with the entity, and which also prohibits the submission of any claims for reimbursement for designated health services furnished pursuant to a prohibited referral;
- The U.S. federal Physician Payments Sunshine Act requirements under the ACA, which require manufacturers of drugs, devices, biologics and medical supplies to report to the Department of Health and Human Services, information related to payments and other transfers of value made to or at the request of covered recipients, such as physicians and teaching hospitals, and certain physician ownership and investment interests in such manufacturers; and
- U.S. state law equivalents of each of the above U.S. federal laws, such as anti-kickback, false claims and self-referral laws, which may apply to items or services reimbursed by any third-party payor, including commercial insurers, and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

In addition, we are subject to complex healthcare laws in the other jurisdictions where we operate, for example the German pharmaceutical-advertising law (*Heilmittelwerbegesetz*), the German Act Against Unfair Competition (*Gesetz gegen den unlauteren Wettbewerb*) or the EU Directive 98/79/EC (IVD Directive) and German laws that implement this EU legislation.

Failure by us or our collaborators, such as Polymedco, to comply with any of the above laws or regulations in the United States or elsewhere could result in substantial penalties or adversely affect our or our collaborators' ability to do business due to restrictions being imposed on us or them, respectively.

1.4.5. Our operations subject us to risks inherent in doing business internationally and require additional governance and compliance functions which, as a small enterprise, we may not have the resources or organizational structure to develop.

Our international operations subject us to laws and regulations in various jurisdictions. Compliance with these laws and regulations often involves significant costs or requires changes in our business practices that may adversely affect our revenue and profitability. Such compliance costs and restrictions on our business may increase as we seek to expand our operations throughout the world. For instance, as we have expanded our U.S. operations in connection with the commercialization of Epi proColon, we have had to comply with complex laws and regulations in the U.S. market. In case we expand in other markets, we and our commercialization partners may be subject to new laws and regulations. It may be difficult to comply with varying requirements in different jurisdictions, and as a result we may need to hire personnel, establish a physical presence or incur other compliance costs when we enter into or expand in a market. In particular, testing protocols and requirements for reimbursement may differ across the jurisdictions in which we seek to do business, and the rules and regulations applicable to our business may change.

In addition, we may become subject to other risks of doing business internationally, such as trade protection measures, import or export licensing requirements or other restrictive actions by U.S., European or foreign governments, price controls, changes in tax laws or changes in a specific country's or region's political or economic environment, any of which could restrict our ability to conduct our business. In particular, we might be impacted by tariffs that the U.S. government might impose on products manufactured abroad but sold on the U.S. market, as we currently manufacture our products in Europe and export to the U.S., and we might not be able to pass the costs on to our customers.

Due to the limited size of our organization and our lack of certain resources, we may not have fully developed governance functions or other operational systems in place. For example, due to our limited size we have not yet established an internal audit function. Furthermore, as we expand in order to develop and commercialize our products successfully, or because of regulatory changes, we may have to develop such functions, which could entail significant costs and strain our management, operating and financial systems and our administrative resources. There can be no assurance that we will be able to implement such governance and compliance systems successfully.

1.4.6. We are subject to environmental, health and safety laws and regulations and may become exposed to liability and substantial expenses in connection with environmental compliance and remediation activities.

Our operations, including our research, development and testing activities, are subject to numerous environmental, health and safety laws and regulations. These laws and regulations govern, among other things, the controlled use, handling, release and disposal of, and the maintenance of a registry for, hazardous materials and biological materials, such as human blood samples and solvents, human cells, chemical solvents, carcinogenic compounds, mutagenic compounds and compounds that have a toxic effect on reproduction, as well as laboratory procedures and exposure to blood-borne pathogens. If we fail to comply with such laws and regulations, we could be subject to fines or other sanctions, which could have, among other things, an adverse effect on our liquidity.

As with other companies engaged in activities similar to ours, we face a risk of environmental liability inherent in our current and historical activities, including liability relating to releases of or exposure to hazardous or biological materials. Environmental, health and safety laws and regulations are becoming more stringent. We may be required to incur substantial expenses in connection with

future environmental compliance or remediation activities, in which case our production and development efforts may be interrupted or delayed.

1.5. Financial Risks

1.5.1. Due to our significant consumption of cash, we regularly require new capital to finance our business operations, the current capital measure will not be sufficient to reach the cash flow break-even point even in a positive scenario and if we cannot raise sufficient capital when needed, we may have to curtail or cease operations and/or file for insolvency proceedings.

For the financing of our business operations, we have experienced a significant consumption of cash and high accounting losses which is expected to continue in the future. For the six-month period ended June 30, 2021, we incurred a net loss for the period of EUR 3,528 thousand. For the financial years ended December 31, 2020, 2019 and 2018, we incurred a net loss for the year of EUR 11,686 thousand, EUR 17,020 thousand and EUR 12,692 thousand, respectively.

On February 1, 2021, we issued subordinated non-interest-bearing mandatory convertible bonds in an aggregate principal amount of EUR 5,500,000.00 (the "**Mandatory Convertible Bonds 2021/2024**"), resulting in net proceeds in the amount of approximately EUR 4.55 million. In addition, in May 2021, we completed the issuance of 1,970,537 new shares against cash contribution by way of private placement which resulted in additional net proceeds of EUR 2.09 million. On June 11, 2021 and on August 23, 2021, the Executive Board, in each case with consent of the supervisory board of the Company, resolved to issue non-interest-bearing subordinated mandatory convertible bearer bonds in the aggregate principal amount of EUR 16,500,000.00 consisting of 165,000 notes with a nominal amount of EUR 100.00 each (each a "**New Bond**" and collectively, the "**New Bonds**") targeting net proceeds of approximately EUR 15.15 million and, on the same date, Deutsche Balaton Aktiengesellschaft (an entity ultimately controlled by Wilhelm K. T. Zours) agreed in a subscription and backstop agreement, which was subsequently amended on August 20, 2021, to, among other things and subject to certain conditions (some of which are beyond the Company's control), purchase at the subscription price all New Bonds still unallocated by the end of the subscription period.

The proceeds from these capital measures may not be sufficient to fully fund our business and growth strategy. In particular, it is unlikely that we will be able to meet our short- to medium-term funding needs solely from cash flows from the sale of products such as Epi proColon. Based on our current rate of cash consumption, the funds raised from these capital measures will not be sufficient to reach the cash flow break-even point. We will, thus, need to raise additional funds through public or private equity or debt financings, corporate collaborations or licensing arrangements to continue to fund or expand our operations, in particular if we fail to implement any of the potential strategic options we are currently pursuing.

Our actual liquidity and capital funding requirements primarily depend on our ability to achieve broader commercialization of Epi proColon, which hinges in particular on achieving Medicare Coverage, as well as the progress in the development of our product candidate, Epi proColon Next-Gen. As CMS recently denied our request for a NCD covering Epi proColon, achieving Medicare Coverage depends in particular on the success of overturning the negative reimbursement decision by CMS or achieving legislation mandating Medicare coverage (see *1.1.3. "— Risks Related to our Business — Our success in commercializing Epi proColon and other (future) products depends in particular on reimbursement from government and health administration authorities, such as Medicare, or other third-party payors like private health insurers. As Medicare coverage for Epi*

proColon, our most important product, was recently denied, it is highly uncertain if and when such success will be achieved."). The development of medical products, such as our product candidate Epi proColon Next-Gen, involves a lengthy and expensive process with uncertain timelines and uncertain outcomes. As the timing and outcome of both those endeavors is uncertain, our business planning is subject to a high degree of uncertainty.

In addition, our actual liquidity and capital funding requirements depend on numerous other factors, including, among others:

- The success of our research, development, and commercialization efforts for potential new products and product candidates;
- Our ability to obtain more extensive coverage and reimbursement for our tests;
- Our ability to collect our accounts receivable;
- The costs and success of further expansion of our sales and marketing activities and research and development activities;
- The degree to which we require additional sales, marketing and reimbursement personnel;
- Our need to finance capital expenditures and further expand our clinical laboratory operations;
- Our general and administrative expenses;
- The cost of any pre- and post-market approval studies and clinical trials we may need to perform to fulfill regulatory requirements or gain clinical acceptance for Epi proColon or other future products and product candidates; and
- The timing and results of any regulatory authorizations that we are required to obtain for our tests.

In addition, the high accounting losses we are currently experiencing may lead, from time to time and in particular if we are not able to obtain new equity funding, to a reduction of our equity to less than half of our nominal capital. In this case, according to Section 92 German Stock Corporation Act (*Aktiengesetz*), the Executive Board must immediately convene a general shareholders' meeting (*Hauptversammlung*) and notify it accordingly.

Additional capital, if needed, may not be available on satisfactory terms, or at all. In addition to any potential dilution, the terms of any financing may materially adversely affect shareholders' holdings or rights. Debt financing, if available, may include restrictive covenants which, in turn, could restrict our business activities. To the extent that we raise additional funds through collaborations and licensing arrangements, it may be necessary to relinquish some rights to our technologies or grant licenses on terms that may not be favorable to us, both of which could have a material adverse effect on our ability to continue pursuing our current business strategy in particular.

Furthermore, our share price is subject to substantial fluctuations and has in the past fallen, and may fall in the future, below EUR 1.00, *i.e.*, below the notional value of one share, which precludes us from issuing new shares at or close to the market price due to the statutory minimum issue price of EUR 1.00 under Section 9 para. 1 of the German Stock Corporation Act (*Aktiengesetz*). As a consequence, in case our share price were to fall below EUR 1.00 again, capital increases as an important source of additional capital might only be implementable after additional measures have been taken. For example, in November 27, 2020, the Company's general shareholders' meeting resolved a capital reduction by way of consolidating eight shares into one share. Prior to such consolidation, the Company's shares had traded at substantially below EUR 1.00. As another

example, we had planned a private placement of new shares for early March 2020. While on March 2, 2020, our shares had traded at EUR 1.60, a three-month high, a few days later, the share price fell below EUR 1.00 and eventually to EUR 0.81, not only forcing us to postpone the planned private placement until the share price rose above EUR 1.00 again, but, when we were finally able to execute the transaction, also generating substantially less proceeds than previously expected. Any such additional measures required in order to raise capital are not only time-consuming and costly, but generally also require the approval of the Company's general meeting, which could be denied or challenged in court, thus preventing us from obtaining the desired additional capital in time.

If we are not able to obtain adequate funding when needed, we may have to delay development programs or selling and marketing initiatives in order to reduce costs. In addition, we may have to work with a partner on one or more of our tests or market development programs, which could lower the economic value of those programs to us. However, we cannot assure that such measures alone would be successful to meet our actual liquidity and capital funding requirements.

In particular, with regard to our working capital requirements, we might need additional capital from time to time, especially due to the negative reimbursement decision for Epi proColon and the resulting limitations in its commercialization. Ultimately, if we fail to rectify any future working capital shortfall, we might be forced to dispose key assets (such as intellectual property rights), curtail or cease operations and/or the Company could become insolvent. In this case, our Executive Board would be required to place the Company into administration or liquidation, which would result in a material risk that the value of the securities of Epigenomics decrease, and investors could lose all or a substantial part of their investment in the Company's securities.

1.5.2. As we need additional funds on an ongoing basis to finance our operations, we are dependent on the condition and the development of the capital markets. Hence, financial market or economic crises and other developments may compromise our financing options and increase the costs of financing, jeopardizing our future existence.

Due to our need to continue funding our operations with additional financing activities, we are dependent on the condition and the development of the capital markets (mainly in the United States and Germany), particularly with regard to the life sciences industry, and future financial market or economic crises could, among others, have a material adverse effect on our ability to carry out such financing activities.

In the recent past, the global economy has been materially adversely affected by the outbreak of COVID-19 in particular. The spread of COVID-19 rapidly affected many countries, resulting in even larger disruptions to economic activity than initially forecasted. Consumption and services output have dropped markedly. In addition, businesses have cut back on investment, leading to a broad-based aggregate demand shock. The steep decline in economic activity has come with a severe hit to the global labor market. The effects of COVID-19 itself have been compounded by containment measures aimed at preventing or mitigating its further expansion, including restrictions on travel, imposition of quarantines, governmental lockdowns and curfews, other social distancing measures, and additional sanitary requirements at, and prolonged closures of, workplaces. Such countermeasures have already caused significant economic downturns and recessions in a number of countries. They could ultimately result in a severe and prolonged global recession and financial crisis with considerable stock market declines and volatility. The future implications of COVID-19 for the global economy are uncertain and may exceed any current expectations for worst case scenarios, especially in case of further "waves" of infections, renewed quarantines, the occurrence of novel mutations of the virus, governmental lockdowns and curfews and/or other social distancing

measures in any territory. The exact implications will depend on a number of factors, such as the duration and spread of COVID-19 as well as the timing, suitability and effectiveness of measures imposed by authorities, the availability of resources required by public authorities to implement effective responses to the situation, the success of vaccination campaigns, as well as the level of civil compliance with such measures. There is no guarantee that these measures will be effective. Over the course of the COVID-19 pandemic, capital markets have experienced fluctuations, which we believe will continue, and potentially intensify, as long as the pandemic lasts or even beyond that.

Should an increased need for capital require additional refinancing via the capital markets, and should such capital measures not be successfully concluded in sufficient quantity, we would, where necessary, be dependent on wholly or partially financing our financial needs via loans or other debt instruments. Whether we would be able to borrow the required funds on appropriate terms depends on a number of factors, including the requirements of the capital markets and the general economic situation. A re-occurrence of events such as those described above or a worsening of the global economic or political situation may result in difficulties in obtaining financing, *i.e.*, higher financing costs, or the unavailability of any financing at all, which could force us to curtail or cease operations and/or file for insolvency.

1.5.3. We are subject to foreign currency exchange risks, in particular, the euro-U.S. dollar exchange rate risk.

A substantial share of the Group's revenue and/or costs is, and is expected to continue to be, generated in U.S. dollars by Epigenomics, Inc., Federal Way, Washington, United States, our wholly owned U.S. subsidiary ("**Epigenomics, Inc.**") and might even increase in case we ever achieve Medicare coverage. However, the Epi proColon product kits are manufactured and invoiced primarily in euros. As proceeds generated in U.S. dollars can, therefore, only partly be used to finance the operating business activities of Epigenomics, Inc., we are exposed to increasing foreign currency exchange risks as our results of operations and cash flows are subject to fluctuations in foreign currency exchange rates, the impact of which we cannot predict. We currently do not engage in hedging transactions to protect against uncertainty in future exchange rates between particular foreign currencies and the euro.

Thus, the development of the euro against the U.S. dollar may have an adverse effect, among others, on our results of operations and financial position. In particular, in the event the U.S. dollar would depreciate against the euro, we may suffer significant financial losses due to foreign exchange rate fluctuations or volatility.

1.5.4. We could be required to pay additional taxes as a result of the loss of our tax loss carryforwards or our R&D tax credit.

Our tax loss carryforwards and our research and development ("**R&D**") tax credit could be reduced, which could lead to an increase in our tax obligations once we recognize net operating profits in a particular jurisdiction, and thus have an adverse effect on our financial position in particular.

As of December 31, 2020, the Company's overall tax loss carryforwards in Germany were estimated at EUR 219 million for corporate income tax and EUR 217 million for trade tax. As a consequence of completed tax audits concerning the assessment periods until December 31, 2014, tax loss carryforwards in the amount of EUR 167 million were undisputed as of December 31, 2020. Under German tax law, our tax losses in Germany generally have an unlimited carryforward period. If, however, for example, as a result of a public takeover offer, more than 50% of the shares of the Company are transferred to a bidder, parties related to this bidder, or a group of bidders with common interests, generally both the current tax loss carryforwards at the level of the Company and

any tax losses arising in the period up to the conclusion of the public takeover offer could be lost in full (subject to certain narrow exceptions).

In addition, in the United States our tax loss carryforwards were estimated to amount to EUR 17.5 million as of December 31, 2020. Generally, tax loss carryforwards arising in tax years beginning before 2018 may offset hundred percent of taxable income, and may be carried forward for up to twenty years. Tax loss carryforwards arising in tax years beginning 2018 or later may offset up to eighty percent of taxable income in the year applied, with excess losses carried forward indefinitely. However, there is a risk that the legislation on the utilization of tax loss carryforwards may change or that utilization of such tax loss carryforwards may become impossible on other grounds. Further, as of December 31, 2020, our R&D tax credit in the United States, was estimated at EUR 3.4 million. This R&D tax credit expires on various dates beginning in 2022 through to 2040.

1.5.5. We have received certain financial aid granted from the EU as well as German state and federal funds, which could be reclaimed in case of non-compliance with granting conditions.

We have received, and may receive in the future, financial aid and research grants from several governmental sources, which could be reclaimed in the event we do not comply with the grant conditions, or we could be subject to administrative and financial penalties for such non-compliance. Any such event may have an adverse impact, among others, on our liquidity and may amplify our financing needs.

For example, in the financial years 2015, 2016 and 2018, we received grants of EUR 970 thausand, EUR 816 thausand and EUR 813 thausand, respectively, from the Horizon 2020 program of the EU's Executive Agency for Small and Medium-sized Enterprises ("**EASME**") – a framework program for research and innovation for small and medium-sized enterprises – for the purpose of developing our blood-based lung cancer test, Epi proLung. Furthermore, in February 2018, we received an initial grant payment of EUR 81 thousand from the European Commission (Directorate General Research & Innovation) as one of 14 partners working on a project called "Advancing a Precision Medicine Paradigm in metastatic Colorectal Cancer; Systems based patient stratification solutions. – COLOSSUS" and we are expected to receive further payments under this project over the course of the next years.

If EASME or the European Commission, as applicable, were to determine that any of the funds granted or to be granted were illegitimate under the terms of the respective grant, or that we are in breach of the grant agreement, we could be subject to recovery of funds awarded, an abandonment of further grants or administrative and financial penalties.

In addition, we have received German state and federal funding under the program of Public Financial Aid to the Commercial Economy (*Öffentliche Finanzierungshilfen an die gewerbliche Wirtschaft im Rahmen der Gemeinschaftsaufgabe "Verbesserung der regionalen Wirtschaftsstruktur"*), which we used to acquire non-current tangible assets. In case of non-compliance with certain granting conditions, the granted funds might be reclaimed in part or in full. Most importantly, the funds are tied to the preservation of the current permanent jobs at our Berlin site and the obligation to keep the subsidized assets in the subsidized place of business for a period of at least until April 8, 2022.

Research grants are an important funding source for us. In the wake of COVID-19 or other future major health crisis, public research funds currently designated for cancer research, could be discontinued, reduced or reallocated to other diseases, thereby adversely affecting our funding from such sources.

1.5.6. Management valuations in our balance sheet and/or our statement of profit or loss depend on many factors that may be especially difficult to predict for novel products like blood-based cancer tests, and incorrect valuations may cause decisions which prove overly risky or cause liquidity crises.

Due to the novelty of our products, including our key product Epi proColon, as well as our product candidates, valuation of our financial statement positions requiring management judgment is particularly difficult and subject to risk of revision.

For example, determining the useful life of capitalized development costs of our products requires a long-term estimation of the market approval timelines for such products, their market acceptance and/or the speed of their market penetration, regulatory developments in key markets, the timing and the extent of reimbursement decisions, and competition, among other parameters. For novel products such as our blood-based cancer tests there are no empirical values and less experience available, which makes any estimations difficult.

Furthermore, reaching or not reaching a milestone such as a market approval decision will lead to reassessments that may significantly change previously expected useful lives. For example, following the FDA approval of Epi proColon on April 12, 2016, the useful life of the capitalized development costs for this product was reassessed and extended from six to ten years, decreasing annual amortization of this asset from EUR 333 thousand to EUR 111 thousand. However, a negative regulatory approval decision regarding one of our products or product candidates could have the opposite effect, decreasing the useful life and increasing annual amortization of the asset.

In addition, due to our size and limited resources, we may not have sufficient processes in place to ensure that management valuations are properly made. Incorrect valuations might cause an overly optimistic estimate of our economic situation, and cause our management to take decisions which in retrospect prove to be affected with an unsuitable degree of risk, ultimately adversely affecting our business.

1.6. Risks Related to the Securities and Shareholder Structure of the Company

1.6.1. Particularly due to our relatively low market capitalization, the market price and trading volume of the Company's shares could fluctuate significantly and shareholders could lose all or part of their investment. As the New Bonds will convert into shares of the Company in 2027 at the latest, holders of the New Bonds are also exposed to the market price risk with respect to the Company's shares and any adverse development regarding the shares will eventually also adversely affect the holders of the New Bonds.

The price as well as the trading volume of the Company's shares have been in the past and may continue to be subject to substantial fluctuations as a result of various factors. These include, among others, changes in the actual or forecast results of operations of the Group or our liquidity and capital funding requirements, variances in our financial performance from the expectations of market analysts and negative assessments by capital markets participants (particularly analysts and investors), changes in reimbursement determinations, in particular by CMS or DAB, relating to Epi ProColon or to other testing services based on our current and future products, announcements by us or our competitors of significant clinical trial results, changes in, or entry into new, licensing or collaborative arrangements or acquisitions, new products introduced by our competitors, announcements regarding the strategic options we are currently evaluating, regulatory changes as

well as the assessment of the related risks, changes in the underlying market conditions, and external factors such as changes in regulatory legislation and the general economic conditions, changes in the shareholder structure, especially the sale of a substantial number of our the Company's shares in the public market or the perception that any such sales might occur, as well as other factors. This is particularly true due to our relatively low market capitalization.

In particular, if we are forced to curtail or cease operations and/or file for insolvency, this could have a material adverse effect on the price of the Company's shares, and our shareholders could lose all or a substantial part of their investment.

This also applies to holders of the New Bonds as any New Bonds which have not been converted on their maturity date in 2027 will be mandatorily converted into shares of the Company, thereby turning bondholders into shareholders. The price of the New Bonds is likely to depend, among others, on the market price of the Company's shares. Hence, any adverse development of the price of the shares will eventually also adversely affect the holders of the New Bonds. The lower the market price of the Company's shares sinks below the conversion price of the New Bonds and the shorter the time period until the date of mandatory conversion of the New Bonds is, the higher the risk of a substantial decrease of the price of the New Bonds. In particular, if the price of the Company's Shares at the time of the conversion is lower than the conversion price, *i.e.* below EUR 1.10, the aggregated volume of the shares received in the conversion would not amount to the nominal value of the New Bonds and holders of the New Bonds would hence lose all or part of their investment.

Moreover, general fluctuations in share prices, especially the price of shares in other companies active in the same industry in which we operate, or a general deterioration in capital markets, can lead to pressure on the price of the Company's shares (or other securities), and these fluctuations in share price may not necessarily be based on our business operations or earnings prospects.

Any such fluctuations in the Company's shares, whether due to Group-specific, industry or general market developments, could cause the value of an investment in the Company's shares to drop substantially.

Additionally, there is no existing trading market for the New Bonds and we do not intend to admit the New Bonds to a regulated market or to include the New Bonds in trading on an unregulated market. In case a trading market for the New Bonds develops nevertheless, the New Bonds' market value could be adversely affected in the same way as described above for our shares.

1.6.2. Current and/or future offerings of debt or equity securities by us could material adversely affect the market price of the Company's securities and could substantially dilute our shareholders' interests, as well as voting rights, in the Company.

In the future, we expect that we need additional capital to finance our business operations and growth, in particular given our expected financing needs, see also *1.5.1. "— Financial Risks — Due to our significant consumption of cash, we regularly require new capital to finance our business operations, the current capital measure will not be sufficient to reach the cash flow break-even point even in a positive scenario and if we cannot raise sufficient capital when needed, we may have to curtail or cease operations and/or file for insolvency proceedings."* We may therefore seek to raise additional capital through offerings of debt securities, such as our current offering of the New Bonds, or additional equity securities. The issuance of, among other things, additional shares, (mandatory) convertible bonds or bonds with warrants may have a material adverse effect on the market value of the shares in the Company and namely the issuance of additional equity securities or securities with rights to convert into equity would dilute the shareholding percentage and the voting rights of

the existing shareholders as well as of the holder of New Bonds upon conversion – if such new shares or bonds are issued without granting subscription rights or similar rights to the existing shareholders or to the extent such rights are not exercised.

In particular, as holders of the recently placed Mandatory Convertible Bonds 2021/2024, and thereafter the New Bonds, exercise their conversion right, the shareholding percentage of other shareholders in the Company not holding any such bonds will substantially decline and their voting rights will be diluted.

For example, under the New Bonds a total of 15,000,000 shares (subject to adjustments due to future capital measures) are expected to be issued as conversion rights are exercised or mandatorily triggered, by no later than September 30, 2027. Based on a number of 12,232,303 outstanding shares as of the date of the Prospectus, this will ultimately lead to a dilution of 55.1% for shareholders not holding any New Bonds. For existing shareholders, who do not exercise their subscription, such a dilution of voting rights may entail a material adverse effect on their ability to influence the voting at general shareholders' meeting of the Company.

We cannot predict or estimate the amount, timing or nature of future offerings because these aspects will depend in part on market conditions at the time of such an offering. Therefore, our shareholders and the holders of the New Bonds bear the risk that such future offerings could reduce the market price of the Company's shares and hence, negatively affect the New Bonds (see *1.6.1. "— Particularly due to our relatively low market capitalization, the market price and trading volume of the Company's shares could fluctuate significantly and shareholders could lose all or part of their investment. As the New Bonds will convert into shares of the Company in 2027 at the latest, holders of the New Bonds are also exposed to the market price risk with respect to the Company's shares and any adverse development regarding the shares will eventually also adversely affect the holders of the New Bonds.")* as well as potentially dilute their shareholdings in the Company. In addition, the acquisition of other companies, or investments in other companies in exchange for newly issued shares, or the exercise of stock options by our employees in the context of possible future stock participation programs, may also dilute the economic value and voting rights of existing shareholders' shares or holders of the New Shares upon conversion.

1.6.3. The New Bonds are subordinated to all senior debt and the New Bond holders will have no shareholder rights prior to conversion.

The New Bonds are subordinated to all senior debt of the Company. The obligations of the Company under the New Bonds constitute subordinated and unsecured obligations, ranking *pari passu* among themselves and with all other equally subordinated obligations. Hence, if we are forced to curtail or cease operations and/or file for insolvency, this could have an adverse effect on the value of the New Bonds, and investors could lose all or a substantial part of their investment in the New Bonds.

Holders of the New Bonds are not shareholders prior to conversion and hence, have no shareholder rights, such as, among other things, a voting right at the shareholders' meetings, a right to receive dividends or other distributions. In particular, as in the event of a takeover bid, mandatory offer and/or the occurrence of a change of control with regard to the Company, the holders of the New Bonds have no right to early conversion, they will have no voting right in case the shareholder's meeting of the Company is to vote on any such events.

If holders of the New Bonds do not comply with their obligations and requirements in case of a mandatory conversion, the relevant New Bonds will be written down to zero and cancelled (subject to a grace period of twenty business days).

1.6.4. The Company does not intend to pay dividends in the future and the New Bonds are zero coupon bonds.

Under German corporate law, a company may only pay dividends if it shows unappropriated retained earnings in its unconsolidated German Commercial Code (*Handelsgesetzbuch*) financial statements. The Company does not anticipate paying any dividends for at least the next several years. We intend to retain all available funds and any future earnings to fund the development and growth of our business. Even if the Company would want to pay dividends, it may not be able to generate sufficient unappropriated retained earnings to be able to distribute dividends under the requirements of German corporate law. A lack of dividend payments could have, among others, an adverse effect on the price of the Company's shares (or other securities), in which case investors could lose some or all of their investment.

The New Bonds are non-interest-bearing (zero coupon), *i.e.* the Company does not pay any interest to their holders, and in general there will be no repayment of the invested amount as the New Bonds mandatorily convert into shares. Hence, if a potential investor is to finance his or her purchase of New Bonds with funds borrowed from a third party, the investor should bear in mind that any payments to such a third party have to be made without relying on any interest payments from the Company or a repayment of the invested amount.

2. GENERAL INFORMATION

2.1. Responsibility for the Contents of the Prospectus

Epigenomics AG, with its registered office at Geneststraße 5, 10829 Berlin, Federal Republic of Germany ("**Germany**"), Legal Entity Identifier ("**LEI**"): 549300X1C4U862NDLN97, and registered with the commercial register maintained by the local court (*Amtsgericht*) of Charlottenburg, Germany (the "**Company**" or "**Epigenomics**" and, together with its consolidated subsidiary, the "**Epigenomics Group**", the "**Group**" or "**we**", "**our**" and "**us**") and mwb fairtrade Wertpapierhandelsbank AG, with its registered office at Rottenbucher Str. 28, 82166 Gräfelfing, Germany, LEI: 391200ENQM9FRDEEWW40 (the "**Bank**"), each assume responsibility for the contents of the two prospectuses contained in this document (together, the "**Prospectus**") pursuant to Section 8 German Securities Prospectus Act (*Wertpapierprospektgesetz*) and Article 11 Regulation (EU) 2017/1129 (the "**Prospectus Regulation**"), and hereby declare that, to the best of their respective knowledge, the information contained in the Prospectus is in accordance with the facts and that the Prospectus makes no omission likely to affect its import.

Neither the Company nor the Bank are required by law to update the Prospectus subsequent to the date hereof, except in accordance with Article 23 of the Prospectus Regulation, which stipulates that every significant new factor, material mistake or material inaccuracy relating to the information included in a prospectus which may affect the assessment of the securities and which arises or is noted between the time when the prospectus is approved and the time when trading on a regulated market begins, whichever occurs later, shall be mentioned in a supplement to the prospectus without undue delay. In any event, the obligation to supplement a prospectus does not apply when a prospectus is no longer valid. The validity of the Prospectus will expire contemporaneously upon the later of the following events: (i) the closing of the offer period concerning the subordinated mandatory convertible bonds, which is expected to occur on or about September 10, 2021 or (ii) with the deliverability in advance (*vorfristige Lieferbarkeit*) of the New Shares (as defined below) (corresponding to the commencement of trading on the regulated market segment (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*)), which is expected to occur on or about September 17, 2021. Accordingly, the validity of the prospectus is expected to expire on or about September 17, 2021. In case, contrary to the Company's expectations, neither of the two aforementioned events has occurred within twelve months of the approval of the Prospectus, the validity of the Prospectus shall, in any event, expire twelve months after its approval on August 24, 2021 pursuant to Article 12 para. 1 Prospectus Regulation, *i.e.*, no later than August 24, 2022.

Where a claim relating to the information contained in the Prospectus is brought before a court, the plaintiff investor might, under the respective national legislation of the relevant member state of the European Economic Area (the "**EEA**"), have to bear the costs of translating the Prospectus before the legal proceedings are initiated.

2.2. Subject Matter of the Prospectus

The Prospectus relates to

- the public offering in Germany by the Company of non-interest bearing, subordinated mandatory convertible bearer bonds in the aggregate principal amount of EUR 16,500,000.00 consisting of 165,000 notes with a nominal amount of EUR 100.00 each (each a "**New Bond**" and collectively, the "**New Bonds**") (the "**Offering**"); and
- the admission to trading on the regulated market (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) with the simultaneous admission to the sub-

segment thereof with additional post-admission obligations (Prime Standard) of up to 15,000,000 ordinary registered shares with no-par value (*Stückaktien*) of the Company, each such share representing a notional amount of the issued share capital of EUR 1.00 of the Company (the "**New Shares**") (the "**Listing**"), which corresponds to the maximum amount of shares resulting from the conversion of the New Bonds in full (subject to any anti-dilution adjustments). Once issued, the New Shares will have full dividend rights as of the beginning of the financial year of their respective issuance and for subsequent financial years, or in the event that such shares are issued prior to the general shareholders' meeting of the Company resolving on the appropriation of the net profits of the preceding financial year, with full dividend rights as from the beginning of the financial year preceding their respective issuance and for subsequent financial years.

The Prospectus constitutes two prospectuses for the purposes of Article 3 of the Prospectus Regulation and has been filed with and approved by the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*, "**BaFin**") as competent authority under the Prospectus Regulation. BaFin has approved the Prospectus only as meeting the standards of completeness, comprehensibility and consistency imposed by the Prospectus Regulation, and BaFin's approval should not be considered as an endorsement of the Company, the New Bonds or the New Shares that are the subject of the Prospectus. Investors should make their own assessment as to the suitability of investing in the New Shares. BaFin can be contacted at Marie-Curie-Str. 24-28, 60439 Frankfurt am Main, Germany, by telephone: +49 228 4108 0, or via its website: www.bafin.de.

Nothing in the Prospectus constitutes an offer of securities for sale in the United States of America ("**United States**" or "**U.S.**") or any other jurisdiction where it is Unlawful to do so. The New Bonds, the Subscription Rights (as defined in *3.5.2.1. "The Offering and the Listing — Offer Conditions — Subscription Rights — Allotment of Subscription Rights"*), and the New Shares have not been, and will not be, registered under the U.S. Securities Act of 1933, as amended (the "**Securities Act**"), or the securities laws of any state of the United States and the securities may not be offered or sold within the United States, except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and applicable state or local securities laws.

2.3. Forward-Looking Statements

The Prospectus contains certain forward-looking statements. These forward-looking statements include descriptions of:

- expected ongoing consequences of the COVID-19 pandemic;
- our strategy and objectives;
- trends that can affect our results of operations and financial position;
- general economic conditions; and
- legal and regulatory proceedings.

A forward-looking statement is any statement that does not relate to historical facts, or events or facts or events as of the date of the Prospectus. This applies, in particular, to statements in the Prospectus containing information on future earnings capacity, plans and expectations regarding our business, such as its growth and profitability, as well as the general economic and legal conditions and other factors to which we are exposed. Statements made using words such as

"expect", "forecast", "intend", "plan" or "predict" are an indication of forward-looking statements. They can be found in several sections in the Prospectus, for example, in the sections *1. "Risk Factors", 8. "Profit Forecast"*, *9. "Markets and Competitive Environment"*, *10. "Business"* and *22. "Recent Developments and Outlook".* In addition, the forward-looking estimates and forecasts reproduced in the Prospectus from third-party sources could prove to be inaccurate. For more information on third-party sources see *2.4. "— Information from Third Parties"*.

The forward-looking statements contained in the Prospectus are based on the Company's current estimates and assessments. These forward-looking statements are based on estimates, predictions, as well as assumptions and are subject to risks, uncertainties and other factors, the occurrence or non-occurrence of which could cause actual circumstances – including with regard to our business, financial position, cash flows and prospects – to differ materially from or fail to meet the expectations expressed or implied in the forward-looking statements. Even if future results of our Group meet the expectations expressed herein, they may not be indicative of the results of any succeeding periods.

In light of the risks, uncertainties, assumptions and other factors, it is also possible that the future events mentioned in the Prospectus may not occur or may differ materially from actual events. The foregoing may prevent the Company from achieving its financial and strategic objectives.

The forward-looking statements contained in the Prospectus are only current as of the date on which they were made. Investors are advised that neither the Company nor the Bank assume any obligation to and do not intend to, except where required by law, publicly release any updates or revisions to these forward-looking statements to reflect any change in the Company's expectations with regard thereto, or any change in events, conditions or circumstances on which any such statement is based, or to adjust them in line with future events or developments.

2.4. Information from Third Parties

Unless otherwise indicated, statements in the Prospectus regarding the market environment, market developments, growth rates, market trends and the competitive situation within the markets and segments in which the Epigenomics Group operates are based on data, statistical information, sector reports and third-party studies as well as our estimates. Management estimates – unless otherwise indicated – are based on internal market observations and/or studies commissioned by the Group.

In drafting the Prospectus, the following third-party sources were used in particular:

- Allied Market Research, press release "Molecular Diagnostics Market worth $31.8 billion by 2026", available at https://www.marketsandmarkets.com/PressReleases /molecular-diagnostic.asp ("**Allied Market Research**");
- American Cancer Society ("**ACS**"), "Cancer Facts & Figures 2021", published in January 2021, available at https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2021/cancer-facts-and-figures-2021.pdf ("**ACS Cancer Facts and Figures 2021**");
- ACS, "Colorectal Cancer Facts & Figures 2020-2022", published in 2020, available at https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/colorectal-cancer-facts-and-figures/colorectal-cancer-facts-and-figures-2020-2022.pdf ("**ACS Colorectal Cancer Facts and Figures 2020-2022**");

- ACS, “Key Statistics for Lung Cancer”, revised in January 2021, available at https://www.cancer.org/cancer/lung-cancer/about/key-statistics.html (“**ACS Lung Cancer Statistics**”);
- ACS, “Key Statistics for Colorectal Cancer”, revised in January 2021, available at https://www.cancer.org/cancer/colon-rectal-cancer/about/key-statistics.html (“**ACS Colorectal Cancer Statistics**”);
- ACS, “About Liver Cancer”, revised on April 1, 2020 and January 12, 2021, available at https://www.cancer.org/content/dam/CRC/PDF/Public/8698.00.pdf (“**ACS Liver Cancer Information**”);
- BCC Research, “The Future of Cancer Diagnostics”, published in August 2020, available at https://blog.bccresearch.com/the-future-of-cancer-diagnostics (“**BCC Research**”);
- BIS Research, “Global In Vitro Diagnostic Market: Focus on Product, Test Type, Application, End User, Region and Competitive Landscape - Analysis and Forecast, 2020-2030”, published in July 2020, available at: https://www.researchandmarkets.com/reports/5134817/global-in-vitro-diagnostic-market-focus-on?utm_source=GNOM&utm_medium=PressRelease&utm_code=bg9654&utm_campaign=1421257+-+In+Vitro+Diagnostics+(IVD)+Markets+2020-2030+and+Impact+of+COVID-19+on+IVD+Testing&utm_exec=joca220prd (“**BIS Research Forecast**”);
- Clinical Trials.gov, https://clinicaltrials.gov/ct2/show/NCT01580540 and https://clinicaltrials.gov/ct2/results?cond=&term=epigenomics%2C+inc.&cntry1=&state1=&recrs=; (together the “**Clinical Trials.gov**”);
- Cohen, Joshua D. *et al*., “Detection and localization of surgically resectable cancers with a multi-analyte blood test”, published in Science, Vol. 359, Issue 6378, pp. 926-930, available at https://science.sciencemag.org/content/359/6378/926 (“**Report on Multi-Analyte Blood Test**”);
- D’Andrea E. *et al*., “Quantifying the impact of adherence to screening strategies on colorectal cancer incidence and mortality”, published in: Cancer Med. 2020 Jan;9(2), pp. 824-836, available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6970061/ (“**Harvard Study**”);
- Deloitte Touche Tohmatsu Limited, “2020 Global life sciences outlook – Focus and transform | Accelerating change in life sciences”, available at https://www2.deloitte.com/content/dam/Deloitte/ce/Documents/about-deloitte/ce_2020_global_life_sciences_outlook.pdf (“**Deloitte 2020 Sector Outlook**”);
- Deloitte Touche Tohmatsu Limited, “2021 global health care outlook – Accelerating industry change”, available at https://www2.deloitte.com/global/en/pages/life-sciences-and-healthcare/articles/global-health-care-sector-outlook.html (“**Deloitte 2021 Global Health Care Outlook**”);
- Dubois, Raymond N, “COVID-19, Cancer Care and Prevention”, published in September 2020, available at: https://pubmed.ncbi.nlm.nih.gov/32958589/ (“**Study on COVID-19, Cancer Care and Prevention**”);
- Erstad, Derek J., Tanabe, Kenneth K., “Hepatocellular carcinoma: early-stage management challenges”, published in J Hepatocell Carcinoma 2017; issue 4: pp. 81–92, available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5500493/ (“**HCC Early-Stage Management**”);

- Goede, Lucas S. *et al.*, "Cost-savings to Medicare from Pre-Medicare Colorectal Cancer Screening", published in: Med Care. 2015 Jul; 53(7), pp. 630–638, available at https://journals.lww.com/lww-medicalcare/Abstract/2015/07000/Cost_Savings_to_Medicare_From_Pre_Medicare.10.aspx ("**Cost-Savings Study**");
- GRAIL Inc., Press Releases dated March 30, 2020, December 16, 2020 and June 4, 2021, respectively, available at https://grail.com/press-releases/grail-announces-validation-of-its-multi-cancer-early-detection-test-published-in-annals-of-oncology/ and https://grail.com/press-releases/new-research-suggests-multi-cancer-early-detection-blood-test-could-reduce-late-stage-cancer-diagnoses-by-more-than-half/ and https://grail.com/press-releases/grail-presents-interventional-pathfinder-study-data-at-2021-asco-annual-meeting-and-introduces-galleri-a-groundbreaking-multi-cancer-early-detection-blood-test/ (together, "**GRAIL**");
- Grand View Research Inc., "Molecular Diagnostics Market Size, Share & Trends Analysis Report By Test Location, By Product (Instruments, Reagents), By Application (Oncology, Infectious Diseases), And Segment Forecasts, 2020 - 2027", published in February 2020, and the report overview at http://web.archive.org/web/20210123051420/https://www.grandviewresearch.com/industry-analysis/molecular-diagnostics-market ("**Grand View Research 2020**");
- Grand View Research Inc., "Molecular Diagnostics Market Size, Share & Trends Analysis Report By Technology (PCR, INAAT, Sequencing, Mass Spectrometry, TMA), By Product, By Test Location, By Application, By Region, And Segment Forecasts, 2021 - 2028", published in April 2021, and the report overview at https://www.grandviewresearch.com/industry-analysis/molecular-diagnostics-market ("**Grand View Research 2021**");
- Kalorama, Overview of the Report "Molecular Diagnostics Markets in the COVID-19 Era (Markets for COVID-19 IVD Tests, Respiratory Tests, Blood Screening, Cancer Markers and Other IVD Tests)", published on July 9, 2020, available at https://kaloramainformation.com/product/molecular-diagnostics-markets-in-the-covid-19-era/ ("**Kalorama Report**");
- Laboratory Corporation of America Holdings, information about the company on its website, available at https://www.labcorp.com/provider-services/hospital-services ("**LabCorp Company Website**");
- Lewin, Jörn *et al.*, "Plasma cell free DNA methylation markers for hepatocellular carcinoma surveillance in patients with cirrhosis: a case control study", published in BMC Gastroenterology (2021) 21:316, available at https://doi.org/10.1186/s12876-021-01714-8 ("**BMC Gastroenterology**");
- Market Research Report "In-Vitro Diagnostics Market by Product & Service (Instrument, Kits), Technology (Immunoassay, MDx, Hematology, Urinalysis), Application (Diabetes, Oncology, Cardiology, Nephrology, Infectious Diseases) End User (Hospitals) - Global Forecast to 2025" (Description), published in November 2020, available at https://www.marketsandmarkets.com/Market-Reports/ivd-in-vitro-diagnostics-market-703.html ("**IVD Market Research Report**");
- Medicare Coverage Database ("**MCD**"), Public Comments for Screening for Colorectal Cancer - Blood-Based Biomarker Tests, available at https://www.cms.gov/medicare-coverage-database/details/nca-view-public-comments.aspx?NCAId=299 ("**Public Comments in the MCD**");

- Naber, Steffie K., "Cost-effectiveness of a multitarget stool DNA test for colorectal cancer screening of Medicare beneficiaries", published in: PLoS One. 2019 Sep 4;14(9):e0220234, available at https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0220234 ("**Cost-Effectiveness Study**");
- National Cancer Institute, Webpages relating to the National Lung Screening Trial, published in 2002 and last updated November 12, 2014, available at http://www.cancer.gov/types/lung/research/nlst-qa ("**NCI Lung Screenings**");
- Omata, Masao *et al*., "Asia–Pacific clinical practice guidelines on the management of hepatocellular carcinoma: a 2017 update", published in Hepatol Int (2017) 11, pp. 317–370, available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5491694/ ("**Asia-Pacific 2017 Update**");
- Oussalah, Abderrahim *et al*., "Plasma mSEPT9: A Novel Circulating Cell-free DNA-Based Epigenetic Biomarker to Diagnose Hepatocellular Carcinoma", published in EbioMedicine 30 (2018) 138–147, available at https://www.ebiomedicine.com/article/S2352-3964(18)30116-6/pdf ("**mSEPT9 Research Paper**");
- Patt, Debra *et al.*, "Impact of COVID-19 on Cancer Care: How the Pandemic Is Delaying Cancer Diagnosis and Treatment for American Seniors", published in November 2020, available at: https://pubmed.ncbi.nlm.nih.gov/33253013/ ("**Study on the Impact of COVID-19 on Cancer Care**");
- Peterse, Elisabeth F. P. *et al*., "Comparing the cost-effectiveness of innovative colorectal cancer screening tests", published in: Journal of the National Cancer Institute 2020 Aug 6:djaa103, available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7850547/ ("**CISNET Study**");
- Rahul Kumar; Catherine R. Lewis., "Colon Cancer Screening", last updated May 9, 2021, available at https://www.ncbi.nlm.nih.gov/books/NBK559064/ ("**Information on CRC Screening**");
- Sarin S.K.; Maiwall, Rakhi, "Global Burden Of Liver Disease: A True Burden on Health Sciences and Economies!!", available at https://www.worldgastroenterology.org/publications/e-wgn/e-wgn-expert-point-of-view-articles-collection/global-burden-of-liver-disease-a-true-burden-on-health-sciences-and-economies ("**WGO Study**");
- U.S. Census data for 2020 on age and sex composition, available at https://data.census.gov/cedsci/table?q=age%20and%20sex%20composition&tid=ACSST1Y2019.S0101 ("**U.S. Census data**");
- US Preventive Services Task Force ("**USPSTF**") Recommendations, available at https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/colorectal-cancer-screening and https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/lung-cancer-screening ("**USPSTF Recommendation Summaries**");
- USPSTF, Final Recommendation Statement Lung Cancer: Screening, available at https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/lung-cancer-screening ("**USPSTF Statements**"); and
- World Health Organization, International Agency for Research on Cancer, "All Cancers Fact Sheet", "Cancer Fact Sheet: Liver", "Population Fact Sheet: China", "Estimated Numbers of Death in 2020, Europe, males" and "Estimated Numbers of Death in 2020, Europe, females" published in December 2020 (collectively, "**Globocan 2020**"), available at

http://gco.iarc.fr/today/data/factsheets/cancers/39-All-cancers-fact-sheet.pdf; http://gco.iarc.fr/today/data/factsheets/cancers/11-Liver-fact-sheet.pdf,http://gco.iarc.fr/today/data/factsheets/populations/160-china-fact-sheets.pdf; https://gco.iarc.fr/today/online-analysis-pie?v=2020&mode=cancer&mode_population=continents&population=900&populations=908&key=total&sex=1&cancer=39&type=1&statistic=5&prevalence=0&population_group=0&ages_group%5B%5D=0&ages_group%5B%5D=17&nb_items=7&group_cancer=1&include_nmsc=1&include_nmsc_other=1&half_pie=0&donut=0#collapse-group-1-4-0; and https://gco.iarc.fr/today/online-analysis-pie?v=2020&mode=cancer&mode_population=continents&population=900&populations=908&key=total&sex=2&cancer=39&type=1&statistic=5&prevalence=0&population_group=0&ages_group%5B%5D=0&ages_group%5B%5D=17&nb_items=7&group_cancer=1&include_nmsc=1&include_nmsc_other=1&half_pie=0&donut=0#collapse-group-1-4-0.

To the extent that information has been sourced from third parties, this information has been accurately reproduced by the Company in the Prospectus and, as far as the Company is aware and is able to ascertain, regarding information published by these third parties, no facts have been omitted which would render the reproduced information inaccurate or misleading. However, market studies and analyses are frequently based on information and assumptions that may not be accurate or technically correct, and their methodology is, by nature, forward-looking and speculative. In particular, any third-party information may not fully reflect the ultimate impact of the ongoing COVID-19 pandemic. Because the effects of this pandemic on the economy, society and markets in which we operate cannot be predicted with accuracy, all current forecasts are subject to a degree of uncertainty. This applies particularly in the context of links and interrelations between the global financial markets, economies and political decisions as each of these factors may have its own separate influence on economic and political developments. For details on COVID-19, its effects on our business and related risks, see *1.1.4. "Risk Factors — Risks Related to our Business — COVID-19 has, and continues to, negatively affect segments of the global economy and has similarly negatively affected our operations, including, among other things, interrupting our supply chain, clinical trials and commercialization activities, as well as, delaying approvals and reimbursement decisions and may continue to do so* in the foreseeable future.*"*

Without any limitation of the assumption of responsibility for the contents of the Prospectus by the Company and the Bank (see *2.1. "— Responsibility for the Contents of the Prospectus"*), neither the Company nor the Bank have verified the figures, market data and other information used by third parties in their studies, publications and financial information, or the external sources on which the Company's estimates are based.

The Prospectus contains forecasts, statistics, data and other information relating to markets and other industry data on the Company's business and markets (together, the "**Market Data**") provided by third-party sources interpreted by us. This Market Data is, in part, derived from published research and additional market studies prepared primarily as a research tool, and reflects estimates of market conditions based on research methodologies including primary research, secondary sources and econometric modeling. The representativeness of the Market Data may be impacted by various factors. We operate in an industry for which it is difficult to obtain precise, relevant Market Data. Such Market Data should therefore be considered with caution and not be solely relied upon, as Market Data is often based on information and assumptions that may be inaccurate or inappropriate, and its methodology is inherently predictive and speculative. We have no reason to believe that such information is false or misleading or that any material fact has been omitted that would render such information false or misleading.

Prospective investors should also note that the Company's own estimates and statements of opinion or belief are not always based on studies from third parties. The Prospectus also contains estimates of Market Data and other data and information derived from such data, which cannot be obtained from publications by market research institutes or from other independent sources. Such information is partly based on our own market observations, the evaluation of industry information (from conferences, sector events, etc.) or internal assessments. The Company's management believes that its estimates of Market Data and other data and the information it has derived from such data assists investors in gaining a better understanding of the industry in which companies of the Epigenomics Group operate in and the Group's position therein. The Company's own estimates have not been checked or verified externally. We nevertheless assume that our own market observations are reliable. However, they may differ from estimates made by competitors of the Epigenomics Group or from future studies conducted by market research institutes or other independent sources.

Information contained on any website mentioned in the Prospectus, including our website, is not incorporated by reference in the Prospectus, is not part of the Prospectus, unless otherwise explicitly indicated, and has not been scrutinized or approved by BaFin.

2.5. Documents Available for Inspection

For as long as the Prospectus is valid, copies of the following documents will be available on the website of the Company (www.epigenomics.com):

- the articles of association of the Company (the "**Articles of Association**");
- the audited consolidated financial statements of Epigenomics AG prepared in accordance with International Financial Reporting Standards issued by the International Accounting Standards Board, as adopted by the European Union ("**IFRS**"), as of and for the financial year ended December 31, 2020 (the "**Audited Consolidated Financial Statements 2020**");
- the audited consolidated financial statements of Epigenomics AG prepared in accordance with IFRS, as of and for the financial year ended December 31, 2019, (the "**Audited Consolidated Financial Statements 2019**");
- the audited consolidated financial statements of Epigenomics AG prepared in accordance with IFRS, as of and for the financial year ended December 31, 2018, (the "**Audited Consolidated Financial Statements 2018**"), and together with the Audited Consolidated Financial Statements 2020 and the Audited Consolidated Financial Statements 2019, the "**Audited Consolidated Financial Statements**");
- the unaudited consolidated interim financial statements of Epigenomics AG prepared in accordance with International Accounting Standard 34: Interim Financial Reporting (IAS34), as of and for the six-month period ended June 30, 2021, (the "**Unaudited Consolidated Interim Financial Statements**", and together with the Audited Consolidated Financial Statements, the "**Consolidated Financial Statements**");
- the audited unconsolidated financial statements of Epigenomics AG for the financial year ended December 31, 2020 prepared in accordance with the German Commercial Code (*Handelsgesetzbuch*) (the "**Audited Unconsolidated Financial Statements 2020**").

Future annual and interim financial reports of the Company will be available on the website of the Company (www.epigenomics.com) and from the German Company Register (*Unternehmensregister*) (www.unternehmensregister.de). Annual financial reports will also be published in the German Federal Gazette (*Bundesanzeiger*).

2.6. Note on Financial Information

The financial information contained in the Prospectus is mainly derived from the Consolidated Financial Statements, which are included in the financial section of the Prospectus, which can be found on the website of the Company (http://www.epigenomics.com/news-investors/financial-reports/). The financial years ended December 31, 2018, 2019, and 2020, are also referred to in the Prospectus as "**financial year 2018**" or "**2018**", "**financial year 2019**" or "**2019**", and "**financial year 2020**" or "**2020**", respectively. The current financial year 2021 to end on December 31, 2021, is also referred to in the Prospectus as "**financial year 2021**", "**current financial year**", or "**2021**".

The historical financial and business information of the Epigenomics Group as of and for the financial years 2020, 2019 and 2018 (i) if presented as "audited" is taken from the Audited Consolidated Financial Statements and Audited Unconsolidated Financial Statements 2020 and (ii) if presented as "unaudited", is either derived from our Audited Consolidated Financial Statements, or taken or derived from our accounting records or our management reporting, or is based on calculations of these figures.

The historical financial and business information of the Group as of and for the six-month periods ended June 30, 2021 and 2020 is presented as "unaudited" and taken or derived from our Unaudited Consolidated Interim Financial Statements or our accounting records or our management reporting, or is based on calculations of these figures.

Certain financial data (including percentages) in the Prospectus have been rounded according to established commercial standards, whereby aggregate amounts (sum totals, sub-totals, differences or amounts put in relation) are calculated based on the underlying unrounded amounts. As a result, the aggregate amounts in the Prospectus may not correspond in all cases to the corresponding rounded amounts contained in the following tables. Furthermore, those rounded figures may not add up exactly to the totals contained in the tables.

The Audited Consolidated Financial Statements were prepared by the Company in accordance with IFRS, as adopted by the European Union, and the additional requirements of German commercial law pursuant to Section 315a German Commercial Code (*Handelsgesetzbuch*). The Audited Consolidated Financial Statements were each audited by Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Cecilienallee 6-7, 40474 Düsseldorf, Germany, branch office Nymphenburger Straße 3b, 80335 Munich, Germany (formerly: Baker Tilly Roelfs AG Wirtschaftsprüfungsgesellschaft and Baker Tilly AG Wirtschaftsprüfungsgesellschaft, "**Baker Tilly**"), who issued in each case an unqualified auditor's report (*uneingeschränkter Bestätigungsvermerk*) thereon as included elsewhere in the Prospectus.

The unqualified auditor's report for the Audited Consolidated Financial Statements 2019 contains the additional remark that a material uncertainty exists which may raise doubts as to the Group's ability to continue as a going concern and poses a risk to the Group's continued existence as a going concern or that the Company's ability to continue as a going concern is dependent on future cash inflows outside the operating business, as included in the section *20. "Financial Information"* of the Prospectus beginning on page F-1.

In this context, the unqualified auditor's report for the Audited Consolidated Financial Statements 2019 (see pages F-102 to F-110 (Independent Auditor's Report to the Audited Consolidated

Financial Statements 2019)) also refers to page F-58 (Notes to the Consolidated Financial Statements 2019) and the "*Financial opportunities and risks*" section of the group management report 2019, which reads as follows:

"As of December 31, 2019, our available liquidity (cash, cash equivalents and marketable securities) amounted to EUR 11.0 million. Management is aware of the risk of having limited liquid assets to appropriately sustain the operations of the business. Without further capital measures and/or cost reduction programs, the continued existence of the Company as a going concern beyond the beginning of 2021 is at risk. In order to extend our financial reach, further liquid funds are therefore to be raised as early as possible in fiscal year 2020. A first step in this direction was the capital increase executed after the end of the reporting period on March 31, 2020, with net proceeds of EUR 3.6 million generated. In recent years, we have repeatedly demonstrated that additional financial resources are accessible to us, even under difficult conditions. We will examine all strategic options in the short term, first and foremost the possibility to attract further funding on the capital market. (…) Also in this context, it is necessary to point out the special situation of the beginning of a global economic crisis in connection with the corona virus in February 2020 – after the end of the reporting period. The further course of this epidemic definitely harbors many imponderable risks, which, however, cannot yet be sufficiently specified in terms of their extent and duration. Until the editorial deadline of this Group Management Report, we have addressed this risk and its potential impact on Epigenomics as far as possible and have taken appropriate precautionary measures. Typically, economic crises and sharply declining stock prices lead to a general restraint of investors. This also results in a risk to the continued existence of the Company as a going concern to the extent that the capital measures necessary for Epigenomics could not be implemented at all or only to an insufficient extent."

In addition, the unqualified auditor's report for the Audited Consolidated Financial Statements 2020 states that a material uncertainty exists which may cast significant doubts on the Company's ability to continue as a going concern without further capital measures. In this context, the unqualified auditor's report for the Audited Consolidated Financial Statements 2020 (see pages F-43 to F-51 (Independent Auditor's Report to the Audited Consolidated Financial Statements 2020)) also refers to page F-7 (Notes to the Consolidated Financial Statements 2020) and the "*Financial opportunities and risks*" section of the group management report 2020, which reads as follows:

"As of December 31, 2020, our available liquidity (cash, cash equivalents and marketable securities) amounted to EUR 4.5 million. Management is aware of the risk of having limited liquid assets to appropriately sustain the operations of the business. The first step was the convertible bond issue placed after the end of the reporting period in January 2021, which generated gross proceeds of EUR 5.5 million. Without further corporate actions the Company's continuing existence is at risk beyond the beginning of 2022. (…) As in the previous year, it is necessary at this point to refer to the specific situation posed by the pandemic, which is still raging around the world with no end in sight, and all of its consequences for the economy, our markets, our Company and our employees. The course of the pandemic continues to pose many imponderable risks, the extent and duration of which still cannot be specified with sufficient precision. (…) Even if the capital markets in 2020 recovered quickly from their short but intense slump at the onset of the crisis and are currently in no worse position then they were before the virus spread, the question is whether a longer-term crisis will continue to have no adverse effect on investor sentiment. This also poses a risk to the Company's status as a going concern if the corporate actions Epigenomics requires cannot be implemented or their scale is insufficient."

The audit of the Audited Unconsolidated Financial Statements 2020 was conducted in accordance with Section 317 German Commercial Code (*Handelsgesetzbuch*) and German Generally Accepted

Standards for Financial Statements Audits, which are promulgated by the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer*), by Baker Tilly.

2.7. Note on Currency

The amounts set forth in the Prospectus in "EUR" or "euro" refer to the single currency of the participating member states in the third stage of the European Union pursuant to the Treaty Establishing the European Community. The amounts set forth in the Prospectus in "USD" or "U.S. dollar" refer to the single currency of the United States.

The functional currency of the Group is the euro and we prepare our financial statements in euro. The table below shows the average exchange rates of the U.S. dollar against the euro for the periods listed as used in the Prospectus. Since Epigenomics, Inc., Federal Way, Washington, United States, our wholly owned U.S. subsidiary ("**Epigenomics, Inc.**"), conducts its financial, commercial and organizational activities independently, the U.S. dollar is its functional currency. In accordance with IAS 21, assets and liabilities are translated at the closing rate while the income statement amounts are, due to practical reasons, translated at exchange rate prevailing on the day of the relevant transaction.

The euro to U.S. dollar exchange rates that have been applied by the Company in the periods under review are:

	Reporting date rates as of June 30,	Average rates for the six-month period ended June 30,		Reporting date rates as of December 31,			Average rates for the Financial Year		
	2021	2021	2020	2020	2019	2018	2020	2019	2018
EUR/USD	1.1884	1.2025	1.1033	1.2271	1.1234	1.1450	1.1470	1.1195	1.1793

2.8. Note Regarding Figures and Technical Terms

Some figures (including percentages) in the Prospectus have been rounded in accordance with standard commercial practice, whereby aggregate amounts (sum totals, sub-totals, differences or amounts put in relation) are calculated based on either the underlying unrounded amounts or the underlying amounts rounded to EUR thousand. As a result, the aggregate amounts in the following tables may not correspond in all cases to the corresponding rounded amounts contained in the following tables. In some instances, such rounded figures and percentages may not add up to 100%, or to the totals or subtotals contained in tables or stated elsewhere in the Prospectus. Furthermore, totals and subtotals in tables may differ slightly from unrounded figures stated elsewhere in the Prospectus due to rounding off in accordance with commercial practice. Figures shown as 0 (referring to a positive amount) or (0) (referring to a negative amount) result from rounding to EUR thousand for the purposes of the Prospectus. A dash ("–") or not available ("n/a") signifies that the relevant figure is not available. Financial information presented in parentheses denotes the negative of such number presented. Change as percentage is calculated by dividing the differences between the starting value and the end value by the starting value. A change in parentheses denotes a deterioration, *i.e.*, a positive value decreasing or a negative value increasing.

The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined.

A glossary of certain technical and financial terms and abbreviations used in the Prospectus is provided at the end of the Prospectus under the heading *21. "Glossary"*. Terms defined within Section *3.4. "The Offering and the Listing — Subscription Offer"* and *4.1.11. "Information about the*

Securities — Information about the New Bonds — Terms and Conditions of the New Bonds" only apply within the respective section and not anywhere else in the Prospectus.

3. THE OFFERING AND THE LISTING

3.1. Subject Matter of the Offering

The Offering relates to the New Bonds.

The extraordinary general shareholders' meeting of the Company held on November 27, 2020 resolved that the executive board (*Vorstand*) of the Company (the "**Executive Board**") is authorized in the period until June 11, 2025, with the consent of the supervisory board (*Aufsichtsrat*) of the Company ("**Supervisory Board**"), to issue once or several times, also simultaneously in several tranches, bearer or registered bonds with warrants, convertible bonds, participation rights or combinations of these instruments in an aggregate nominal amount of up to EUR 150,000,000.00 with or without a fixed term and to grant option rights to the holders or creditors of bonds with warrants and/or participation rights with warrants and grant conversion rights to the holders or creditors of convertible bonds and/or convertible participation rights for up to a total of 20,564,923 no-par value registered shares (*Stückaktien*) of the Company representing an aggregate notional portion of the share capital of the Company of up to EUR 20,564,923.00 as further specified in the terms and conditions of these bonds or participation certificates. Based on this authorization, on June 11, 2021 and on August 23, 2021, the Executive Board, in each case with consent of the Supervisory Board, resolved to issue the New Bonds in the aggregate principal amount of up to EUR 16,500,000.00, which corresponds to a maximum amount of 15,000,000 shares of the Company resulting from the conversion of the New Bonds in full (subject to any anti-dilution adjustments).

The existing shareholders of the Company will be granted indirect subscription rights (*mittelbare Bezugsrechte*) in accordance with Section 221 para. 4 and Section 186 para. 5 German Stock Corporation Act (*Aktiengesetz*). In an engagement agreement regarding the handling of the execution of the Offering and Listing entered into on July 15, 2021 among the Company and the Bank (the "**Engagement Agreement**"), the Bank has agreed, subject to certain conditions, to subscribe for the New Bonds and to offer such New Bonds in a public offering to the Company's shareholders in connection with an indirect subscription right (*mittelbares Bezugsrecht*) (the "**Subscription Offer**") by entering into a subscription agreement with the Company (the "**Subscription Agreement**").

For further details, see also *2.2. "General Information — Subject Matter of the Prospectus".*

3.2. Subject Matter of the Listing

The Listing relates to the New Shares.

The New Shares result from the Company's Conditional Capital XIV (as defined below) resolved by the general shareholders' meeting of the Company on June 12, 2020, as amended by resolution of the extraordinary general shareholders' meeting of the Company on November 27, 2020.

The New Shares shall be delivered to the holders of the New Bonds, upon conversion of the New Bonds, to satisfy the Company's corresponding obligation pursuant to the terms and conditions of the New Bonds (see *4.1.11. "— Terms and Conditions of the New Bonds"*). Starting on October 1, 2021, the New Bonds may be converted into New Shares during the first 14 days of each quarter. Any New Bond still outstanding on September 30, 2027 shall be mandatorily converted into New Shares.

In line with the Engagement Agreement, the Bank, together with the Company, applied for admission of the New Shares to trading on the regulated market segment (*regulierter Markt*) of the Frankfurt

Stock Exchange (*Frankfurter Wertpapierbörse*) and, simultaneously, on the sub-segment thereof with additional post-admission obligations (Prime Standard). For further details see *2.2. "General Information — Subject Matter of the Prospectus".*

The decision on the admission of the New Shares is expected to be announced on or about September 15, 2021. The decision on the admission of the New Shares to trading will be made by the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) at its sole discretion. The application for admission to trading relates to the total number of New Shares which is expected to be decided on by the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) *en bloc* with respect to all of the New Shares. Subsequently, the declaration of deliverability in advance (*vorfristige Lieferbarkeit*) of all of the New Shares, which in the case at hand corresponds to the commencement of trading of the New Shares, is expected to occur on or about September 17, 2021.

3.3. Scheduled Timetable

The planned timetable for the Offering and the Listing is as follows:

August 24, 2021	Approval of the Prospectus by BaFin. Publication of the approved Prospectus.
August 26, 2021	Publication of the Subscription Offer relating to the New Bonds in the German Federal Gazette (*Bundesanzeiger*).
August 27, 2021	Commencement of the Subscription Period (as defined below) for the New Bonds. Trading of the shares of the Company "ex subscription right". Commencement of trading in subscription rights for the New Bonds.
September 8, 2021 12:00 noon (CEST)	End of trading in subscription rights for the New Bonds.
September 10, 2021	End of the Subscription Period for the New Bonds.
September 13, 2021	Announcement on the final results of the Offering on the website of the Company (www.epigenomics.com).
September 14, 2021	Book-entry delivery of the New Bonds.
September 15, 2021	Expected admission decision by the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) regarding the New Shares.
September 17, 2021	Deliverability in advance (*vorfristige Lieferbarkeit*) of the New Shares, which corresponds to the commencement of trading of the New Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*).

The Prospectus will be published on the website of the Company (www.epigenomics.com/news-investors/convertible-bonds-2027/).

3.4. Subscription Offer

An English translation of the binding German language Subscription Offer expected to be published on or about August 26, 2021 in the German Federal Gazette (*Bundesanzeiger*) is provided below:

Epigenomics AG

Berlin

ISIN DE000A3H2184 / WKN A3H218

The following subscription offer for the subscription of convertible bonds of Epigenomics AG is exclusively addressed to current shareholders of Epigenomics AG.

Subscription Offer

for the subscription of an non-interest-bearing mandatory convertible bond (ISIN DE000A3E5UB2 / WKN A3E5UB)

On June 12, 2020, the annual general shareholders' meeting of Epigenomics AG, Berlin (the "Bond Debtor" or the "Company") authorized the executive board (*Vorstand*) of the Company, with the consent of the supervisory board (*Aufsichtsrat*), to issue once or several times before June 11, 2025, bearer or registered bonds with warrants, convertible bonds, participation rights or combinations of these instruments in an aggregate nominal amount of up to EUR 150,000,000.00 with or without a fixed term and to grant option rights to the holders or creditors of bonds with warrants and/or participation rights with warrants and grant conversion rights to the holders or creditors of convertible bonds and/or convertible participation rights for up to a total of 20,564,923 no-par value registered shares (*Stückaktien*) of the Company representing an aggregate notional portion of the share capital of the Company of up to EUR 20,564,923.00 as further specified in the terms and conditions of these bonds or participation certificates, since amended by the extraordinary general shareholders' meeting of the Company on November 27, 2020 (the "Authorization").

Based on the Authorization, the executive board (*Vorstand*) of the Company resolved on June 11, 2021 and on August 23, 2021, in each case with the consent of the supervisory board (*Aufsichtsrat*) on the same day, to issue convertible bonds with an aggregate principal amount of up to EUR 16,500,000.00, divided into up to 165,000 bearer bonds (the "Mandatory Convertible Bonds") with a nominal amount of EUR 100.00 each (the "Nominal Amount"). Every Mandatory Convertible Bond may or must be converted into registered no-par value shares (*Stückaktien*) with a notional interest of EUR 1.00 in the share capital of the Company (the "Convertible Shares"). The Mandatory Convertible Bonds shall be offered to the shareholders of the Company for subscription at an issue amount of 100% of the respective nominal amount, corresponding to EUR 100.00 per Mandatory Convertible Bond. The subscription price (the "Subscription Price") is equal to the issue amount. No periodic interest is paid on the Mandatory Convertible Bonds. There is generally no repayment of capital. Holders of Mandatory Convertible Bonds are obliged to convert the Mandatory Convertible Bonds into shares at the end of their term.

Pursuant to the terms and conditions of the Mandatory Convertible Bonds (the "Terms and Conditions of the Bonds"), the liabilities of the Company from the Mandatory Convertible Bonds constitute subordinated and unsecured liabilities, as described in more detail below in the section entitled "Terms and Conditions of the Bonds – Status, Subordination and Prohibition on Payments applicable prior to an Insolvency", which are subordinated to the liabilities pursuant to Section 39 para. 1 sentence 1 no. 5 of the German Insolvency

Code ("InsO"). A repayment of capital (provided only as an exception in the Terms and Conditions of the Bonds) requires that (i) no insolvency event has occurred and no insolvency event continues to exist on the relevant payment date and (ii) the payment of the relevant amount would also not trigger an insolvency event or would accelerate its imminent occurrence. Such a payment prohibition may apply independently of and even prior to the commencement of insolvency or liquidation proceedings against the Company and may be valid for an indefinite period and even permanently. Special reference is made to the mandatory conversion at the end of the term, which is generally provided for in the Terms and Conditions of the Bonds. Investors who acquire Mandatory Convertible Bonds can therefore generally not expect repayment of the Mandatory Convertible Bonds, but will instead receive shares in the Company at the latest at the end of the term.

The principal terms and conditions of the Mandatory Convertible Bonds are set out below in the section entitled "Terms and Conditions of the Bonds".

The subscription rights (ISIN DE000A3E5CT2 / WKN A3E5CT) shall be separated from the shareholdings to the extent of the present subscription right. They shall be booked to the shareholders' custodian banks by Clearstream Banking AG on August 31, 2021. The determination of the subscription rights to which the shareholders are entitled in each case shall be based on their respective depository balance of shares at the end of August 30, 2021 (record date). This depository balance represents – on the basis of a period of two trading days for the settlement of share transfers – the shareholder position at the end of August 26, 2021. From August 27, 2021 onwards, the existing shares of the Company (ISIN DE000A3H2184, WKN A3H218) shall be listed "ex subscription right".

The subscription rights shall be deemed to be proof of the right to subscribe for the Mandatory Convertible Bonds. The Mandatory Convertible Bonds shall be offered to the shareholders against contributions in cash at a subscription ratio of 74 : 1 or 74 : EUR 100.00, respectively ("Subscription Offer"). This means that each shareholder is entitled to purchase one (1) Mandatory Convertible Bond with the nominal amount of EUR 100.00 at the Subscription Price for every 74 shares held, subject to compliance with applicable law. In order to permit an even subscription ratio, an existing shareholder has waived the subscription rights arising from 22,303 existing shares of the Company.

To the extent that the subscription ratio leads to fractional claims for Mandatory Convertible Bonds, the shareholders have no claim to delivery of Mandatory Convertible Bonds or cash settlement with respect to the resulting fractional entitlements. In this respect, the subscription right is excluded as a precautionary measure.

The shareholders are granted the statutory subscription right to the Mandatory Convertible Bonds as an indirect subscription right in such a way that mwb fairtrade Wertpapierhandelsbank AG, Gräfelfing (the "Subscription Agent") is admitted to subscribe for and take up the Mandatory Convertible Bonds with the obligation to allocate the Mandatory Convertible Bonds to the shareholders of the Company in accordance with the exercise of subscription rights or oversubscription rights (as described in the section "Terms and Conditions of the Subscription Offer – Oversubscription and Allocation") or in accordance with the backstop agreement (as described in the section "Terms and Conditions of the Subscription Offer – Backstop Agreement") at the Subscription Price.

In order to avoid exclusion from exercising their subscription rights, we kindly request our shareholders to exercise their subscription rights to the Mandatory Convertible Bonds with the Subscription Agent in the period

from August 27, 2021 to September 10, 2021 (in each case inclusive)

(the "Subscription Period")

through their respective custodian bank during its regular business hours. Subscription rights that are not exercised in due time shall expire worthless. No compensation is paid for subscription rights that are not exercised.

In order to exercise the subscription right, we ask our shareholders or holders of subscription rights to issue a corresponding instruction to their custodian bank. Shareholders or holders of subscription rights who wish to exercise their subscription rights must pay the Subscription Price per Mandatory Convertible Bond through their custodian bank to Bankhaus Gebr. Martin AG acting as execution agent ("Execution Agent") for the Subscription Agent when exercising the subscription right, but no later than on the last day of the Subscription Period, September 10, 2021. The date of receipt of funds by the Execution Agent shall be the relevant date.

Conditions of the Subscription Offer

Subscription Price

The Subscription Price corresponds to the issue amount of 100% of the nominal amount per Mandatory Convertible Bond, thus EUR 100.00 per Mandatory Convertible Bond.

Trading of Subscription Rights

The subscription rights to the Mandatory Convertible Bonds will be freely transferable outside the United States of America in compliance with Regulation S ("Regulation S") under the U.S. Securities Act of 1933, as amended, and are expected to be tradable in the period from August 27, 2021 (inclusive) to September 8, 2021, 12:00 noon (CEST), on the unregulated market (*Freiverkehr*) of the Hamburg Stock Exchange (*Hanseatische Wertpapierbörse Hamburg*). A corresponding application has been made by the Subscription Agent. The Company, and the Subscription Agent provide no guarantee that such trading will actually take place.

In the event of a termination of the Subscription Offer, subscription rights trades already effected shall not be reversed (see section "**Important Notes – Termination of the Subscription Offer**" below).

Oversubscription and Allocation

Each shareholder who exercises his subscription right in its entirety (other than any residual subscription rights that would lead to fractional amounts of Mandatory Convertible Bonds and are excluded) may (already upon exercising the subscription right) submit binding purchase orders for further Mandatory Convertible Bonds (the "Oversubscription").

The Company grants shareholders a right to Oversubscription subject to the following conditions: Any Mandatory Convertible Bonds not subscribed for as a result of the Subscription Offer may only be allocated to persons who have exercised their subscription rights in their entirety (other than any residual subscription rights that would lead to fractional amounts of Mandatory Convertible Bonds and are excluded). The maximum number of Mandatory Convertible Bonds that can be registered for Oversubscription corresponds to three times the number of Mandatory

Convertible Bonds for which the respective shareholder or investor has exercised his or her subscription rights.

To the extent that, due to high demand in connection with Oversubscription, it is not possible to allocate to all of the shareholders all of the Mandatory Convertible Bonds which they have oversubscribed for, offers to purchase Mandatory Convertible Bonds in connection with Oversubscription shall be allocated in proportion to the ratio of all Mandatory Convertible Bonds available for Oversubscription to all Mandatory Convertible Bonds for which they have oversubscribed. To the extent that the allocation of Mandatory Convertible Bonds resulting from the Oversubscription by several shareholders would result in an allocation of fractions of Mandatory Convertible Bonds, the mathematical fractions shall be rounded down to a full number. With regard to the resulting fractions, the shareholders have no claim to delivery of Mandatory Convertible Bonds, but shall only be reimbursed the amount paid for the fractions.

The price for the Mandatory Convertible Bonds to be acquired in connection with the Oversubscription corresponds to the Subscription Price and thus also amounts to EUR 100.00 per Mandatory Convertible Bond.

If all holders of subscription rights exercise their subscription rights and no subscription right fractions arise over the course of the exercise, an Oversubscription cannot be granted. An Oversubscription is only possible for whole Mandatory Convertible Bonds with a nominal amount of EUR 100.00 each.

Shareholders may submit purchase orders in connection with the Oversubscription for additional Mandatory Convertible Bonds via their custodian bank during regular business hours within the above-mentioned Subscription Period. Shareholders are requested to use the order form provided by the custodian banks for this purpose. Binding purchase orders for Mandatory Convertible Bonds as part of the Oversubscription shall only be taken into account if the Oversubscription declaration, as well as the corresponding purchase price are received by the Execution Agent by no later than the last day of the Subscription Period, *i.e.* by September 10, 2021.

Backstop Agreement

On June 11, 2021, the Company entered into an agreement with its shareholder Deutsche Balaton Aktiengesellschaft, which was amended on August 20, 2021 (the "Backstop Agreement"), under which Deutsche Balaton Aktiengesellschaft undertook, subject to certain conditions, to subscribe for Mandatory Convertible Bonds in an aggregate principal amount of up to EUR 16,500,000.00 by exercising its subscription rights entirely and, in addition, by acquiring Mandatory Convertible Bonds which the holders of subscription rights have not subscribed to as part of their subscription rights or by exercising Oversubscription rights ("Backstop"). Conversely, in the event that the Authorization is exercised, the Company undertook under the Backstop Agreement to offer Deutsche Balaton Aktiengesellschaft, after expiry of the Subscription Period and to the extent that Deutsche Balaton Aktiengesellschaft is obliged to purchase unsubscribed Mandatory Convertible Bonds, Mandatory Convertible Bonds for purchase.

Subscription Rights not Exercised

There shall be no compensation for subscription rights that are not exercised. Upon expiration of the Subscription Period, subscription rights not exercised shall expire worthless.

Terms and Conditions of the Bonds

The Mandatory Convertible Bonds that can be subscribed for in the Subscription Offer are subject to the Terms and Conditions of the Bonds, which are available in hard copy at the Company (Epigenomics AG, Geneststraße 5, 10829 Berlin) and for download from the Company's website

www.epigenomics.com

under "News & Investoren — Pflichtwandelanleihe 2021/2027". The principal Terms and Conditions of the Mandatory Convertible Bonds are as follows:

Only the complete Terms and Conditions of the Bonds are binding. All interested parties are strongly advised to base their decision on the exercise of subscription rights only on the complete Terms and Conditions of the Bonds.

Nominal Value and Denomination

The bond issuing of the Company in an aggregate principal amount of up to EUR 16,500,000.00 is divided into up to 165,000 mandatory convertible bearer bonds with a nominal amount of EUR 100.00 each.

Status, Subordination and Prohibition on Payments Applicable Prior to an Insolvency

In accordance with the Terms and Conditions of the Bonds, the liabilities of the Company arising from the Mandatory Convertible Bonds constitute subordinated and unsecured liabilities subordinated to all liabilities pursuant to Section 39 para. 1 sentence 1 no. 5 InsO and to all other present and future liabilities of the Bond Debtor which, under their terms or on the basis of mandatory law, have the same ranking as liabilities pursuant to Section 39 para. 1 sentence 1 no. 5 InsO or take precedence over such liabilities, including liabilities ranked in accordance with Section 38 and Section 39 para. 1 sentence 1 no. 1 to 4 InsO. The obligations of the Bond Debtor under the Mandatory Convertible Bonds have equal priority among themselves. They have equal priority in relation to other obligations of the Bond Debtor that are subordinated in the same way. A repayment of capital (provided only as an exception in the Terms and Conditions of the Bonds) requires that (i) no insolvency event has occurred and no insolvency event continues to exist on the relevant payment date and (ii) the payment of the relevant amount would also not trigger an insolvency event or would accelerate its imminent occurrence. Such a payment prohibition may apply independently of and even prior to the commencement of insolvency or liquidation proceedings against the Company and may be valid for an indefinite period and even permanently. An insolvency event in this context shall have occurred irrespective of the initiation of insolvency proceedings if, with regard to the Bond Debtor, there is a reason to open insolvency proceedings within the meaning of the InsO.

Certification and Transferability

The Mandatory Convertible Bonds are represented by a global bearer bond certificate (the "Global Certificate") without interest coupons. The Global Certificate shall be held in custody by Clearstream Banking AG, Frankfurt am Main ("Clearstream Banking") until all obligations of the Bond Debtor arising from the Mandatory Convertible Bonds have been fulfilled. The Mandatory Convertible Bonds are transferable by means of corresponding depositary entries in accordance with the applicable provisions of Clearstream Banking. The Mandatory Convertible Bonds are subject to restrictions on transfer in certain jurisdictions, including the United States.

No Payment of Interest

No interest payments are made on the Mandatory Convertible Bonds (zero coupon).

Term and Mandatory Conversion at Final Maturity Subject to Early Conversion by Creditors

The term of the Mandatory Convertible Bonds starts on September 14, 2021, and ends on September 29, 2027.

To the extent that the Mandatory Convertible Bonds have neither been converted nor repurchased and cancelled prior to the maturity date, the holders of Mandatory Convertible Bonds are obliged at the end of the term, in accordance with the more detailed Terms and Conditions of the Bonds, to convert their Mandatory Convertible Bonds into the number of Convertible Shares of the Bond Debtor (the "Mandatory Conversion") that is calculated by dividing the nominal amount of the Mandatory Convertible Bonds (EUR 100.00 each) by the conversion price. Upon Mandatory Conversion, only whole shares shall be delivered. Remaining fractions of shares are not delivered and there will be no cash settlement for fractions of shares.

Special reference is made to the Mandatory Conversion at maturity, which is generally provided for in the Terms and Conditions of the Bonds. Investors who acquire Mandatory Convertible Bonds can therefore generally not expect repayment of the Mandatory Convertible Bonds, but shall instead receive shares in the Company at the latest at maturity.

Conversion Right

The bondholders have the right (the "Conversion Right") to convert each Mandatory Convertible Bond into Convertible Shares in whole at the conversion price from October 1, 2021 (inclusive) to July 15, 2027 (exclusive) within the first 14 calendar days of each calendar quarter (each a "Conversion Period" as further defined in the Terms and Conditions of the Bonds). If the last day of a Conversion Period is not a business day, a Conversion Period ends on the next business day following such day. In addition, the bondholders may not exercise the Conversion Right during certain excluded periods in temporal proximity of (i) any shareholders' meetings of the Company and (ii) the offer and implementation of certain capital measures of the Company, each as further defined in the Terms and Conditions of the Bonds. Only whole shares shall be delivered upon conversion. Remaining fractions of shares are not delivered and there will be no cash settlement for fractions of shares.

Conversion Price

Subject to an adjustment for anti-dilution reasons in accordance with the Terms and Conditions of the Bonds, the conversion price shall be EUR 1.10 (the "Conversion Price").

Conversion Shares

The Mandatory Convertible Bonds shall be converted into registered no-par value shares (*Stückaktien*) of the Company with a *pro rata* amount of the share capital of the Company of EUR 1.00 per share (the "Conversion Shares"). From the beginning of the Company's financial year in which the shares are issued, the Conversion Shares are entitled to receive dividends for this and all subsequent financial years of the Company (provided that dividends are paid); to the extent that Conversion Shares are issued prior to the Company's annual general shareholders' meeting resolving on the appropriation of the balance sheet profit of the preceding financial year, the dividend entitlement of such Conversion Shares shall also apply to the financial year

preceding their issue. The Conversion Shares will be subject to restrictions on transfer in certain jurisdictions, including the United States.

Dilution Protection

The Terms and Conditions of the Mandatory Convertible Bonds provide for the usual dilution protection for convertible bonds in the event of capital changes. No adjustment is made in the event of a takeover bid, mandatory offer and/or the occurrence of a change of control with regard to the Company; in these cases, the bondholders also have no right to early conversion.

Termination Rights

Each bondholder is entitled to terminate all or some of its Mandatory Convertible Bonds and demand their immediate repayment at their nominal amount if the Company announces its insolvency or ceases to make payments, or if insolvency proceedings are commenced against the Company or the Company files an application to institute such proceedings. There are no further rights of termination.

Important Notes

Publication of a Prospectus

In connection with the issuance of the Mandatory Convertible Bonds the Company published, on August 24, 2021, a securities prospectus on the Company's website at

www.epigenomics.com

under "News & Investoren – Pflichtwandelanleihe 2021/2027" ("the Prospectus").

Shareholders and investors are advised to read the Prospectus carefully before deciding on the exercise, acquisition or disposal of subscription rights or the exercise of Oversubscription rights or the acquisition or disposal of Mandatory Convertible Bonds.

Termination of the Subscription Offer

The Company and the Subscription Agent are entitled to terminate the Subscription Offer at any time, even after expiry of the Subscription Period and until delivery of the Mandatory Convertible Bonds, if the issue of the Mandatory Convertible Bonds is inadmissible or impossible for legal reasons, or if the executive board (*Vorstand*) and the supervisory board (*Aufsichtsrat*) come to the conclusion that the implementation of the Subscription Offer is no longer in the Company's interest. Furthermore, the Subscription Agent is entitled, under certain conditions, to withdraw from the subscription agreement. These circumstances include, but are not limited to material adverse changes in the business or financial conditions of the Company and/or its subsidiary, material restrictions on securities trading or banking activities, the outbreak or escalation of hostilities or war, or the occurrence of acts of terrorism or other disasters or crises that have a material adverse effect on the financial markets in Germany, the United Kingdom or the United States.

In the event of termination of the Subscription Offer, the subscription right (including the Oversubscription right) and the offer to purchase the Mandatory Convertible Bonds shall lapse. A termination also applies with regard to subscription rights already exercised and Oversubscription rights already exercised. The subscription registrations shall be reversed. Investors who incurred costs as a result of purchasing and/or exercising their subscription rights and/or Oversubscription rights would suffer a loss in this case. A reversal of subscription right trades already effected shall not take place in the event of

termination of the Subscription Offer. Investors who have acquired subscription rights through a stock exchange would accordingly suffer a loss in this case.

If short sales have already taken place prior to the entry of the Mandatory Convertible Bonds in the securities accounts of the respective purchaser, the seller alone will bear the risk of not being able to fulfill its obligations entered into through a short sale by timely delivery of Mandatory Convertible Bonds.

Stock Exchange Trading of the Conversion Shares

Under the Terms and Conditions of the Bonds, the Company does not owe Conversion Shares that are admitted to trading on a regulated market. However, the Company shall endeavor to ensure that, upon delivery, the Conversion Shares are admitted to trading on the regulated market of the Frankfurt Stock Exchange with simultaneous admission to trading in the sub-segment of the regulated market (*regulierter Markt*) with additional post-admission obligations (Prime Standard) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and, if this is not the case, that the Conversion Shares are admitted to trading there after delivery.

No Stock Exchange Trading of the Mandatory Convertible Bonds

The Company does not intend to admit the Mandatory Convertible Bonds to a regulated market or to include the Mandatory Convertible Bonds in trading on an unregulated market.

Selling Restrictions

This document does not constitute an offer of securities for sale in the United States. The subscription rights, the Mandatory Convertible Bonds, and the Convertible Shares may not be offered or sold in the United States without registration or an exemption from registration obligations. The Subscription Offer is not intended for shareholders in Australia, Japan, Canada or South Africa. The acceptance of the offer of the Mandatory Convertible Bonds outside the Federal Republic of Germany ("Germany") may be subject to restrictions. Persons who intend to accept the offer outside of Germany are requested to inform themselves about and to observe any restrictions existing outside of Germany.

Berlin, August 2021

Epigenomics AG

The executive board (*Vorstand*)

3.5. Offer Conditions

3.5.1. Subscription Ratio and Subscription Price

The New Bonds will be offered to the existing shareholders of the Company against contributions in cash at a subscription ratio of 74 : 1 or 74 : EUR 100.00, respectively, *i.e.* one New Bond with the nominal amount of EUR 100.00 may be acquired for every 74 shares of the Company (the "**Subscription Ratio**"). In order to permit an even subscription ratio, an existing shareholder has waived the subscription rights arising from 22,303 existing shares of the Company. To the extent that the subscription ratio leads to fractional claims for New Bonds, the shareholders have no claim to delivery of New Bonds or cash settlement with respect to the resulting fractional entitlements. In this respect, the subscription right is excluded as a precautionary measure as well.

The subscription price corresponds to the issue amount of 100% of the nominal amount per New Bond, thus EUR 100.00 per each note of the New Bonds (the "**Subscription Price**").

3.5.2. Subscription Rights

3.5.2.1. Allotment of Subscription Rights

The statutory subscription rights to the New Bonds (the "**Subscription Rights**") will be separated from the shareholdings. They are scheduled to be booked to the shareholders' custodian banks by the collective securities depositary Clearstream Banking Aktiengesellschaft, Mergenthalerallee 61, 65760 Eschborn, Germany ("**Clearstream**") on or about August 31, 2021. The determination of the Subscription Rights to which the shareholders are entitled in each case shall be based on their respective holdings of shares of the Company at the end of August 30, 2021 (record date). From August 27, 2021 onwards, the existing shares of the Company (ISIN: DE000A3H2184, WKN: A3H218) will be listed "ex subscription right", *i.e.*, not granting any further Subscription Rights.

The shareholders will be granted the Subscription Rights to the New Bonds as an indirect subscription right (*mittelbares Bezugsrecht*) in such a way that the Bank in its capacity as the subscription agent is admitted to subscribe for and take up the New Bonds with the obligation to allocate them to the shareholders of the Company in accordance with the exercise of Subscription Rights, Oversubscription Rights (as defined below) and with the Backstop Agreement 2021 (as defined below).

3.5.2.2. Exercise of Subscription Rights

In order to exercise Subscription Rights, their holders must instruct their respective custodian bank accordingly. Holders of Subscription Rights who wish to exercise their Subscription Rights must also pay the Subscription Price per New Bond through their custodian bank to Bankhaus Gebr. Martin AG acting as execution agent ("**Execution Agent**") for the Subscription Agent when exercising the Subscription Rights, but no later than on the last day of the Subscription Period.

There will be no compensation for Subscription Rights that are not exercised. Upon expiration of the Subscription Period, Subscription Rights not exercised will expire worthless.

Subscription Rights held by persons who are resident of the United States may only be exercised upon confirmation of the following warranties: (a) it understands that the Subscription Rights, the New Bonds and the New Shares have not been and will not be registered under the under the Securities Act or any other applicable U.S. state securities laws and are being offered and issued or sold in a transaction not involving a public offering in the United States, that is exempt from the registration requirements of the Securities Act; (b) it is acquiring the Subscription Rights, the New Bonds and the New Shares, as the case may be, for investment purposes and not with a view to any distribution (within the meaning of the U.S. federal securities laws) of the securities; (c) it understands that the Subscription Rights, the New Bonds and the New Shares are restricted securities within the meaning of Rule 144(a)(3) of the Securities Act; and (d) it will not transfer any of the Subscription Rights, the New Bonds and the New Shares except in compliance with Regulation S under the Securities Act ("**Regulation S**") or pursuant to an effective registration statement under the Securities Act.

3.5.2.3. Transferability and Trading of Subscription Rights

The Subscription Rights will be freely transferable outside the United States in compliance with Regulation S and are expected to be tradable in the period from August 27, 2021 (inclusive) to September 8, 2021, 12:00 noon (CEST), on the unregulated market (*Freiverkehr*) of the Hamburg Stock Exchange (*Hanseatische Wertpapierbörse Hamburg*). A corresponding application was made by the Bank.

The transferability and trading of Subscription Rights held by persons who are resident of the United States are limited as set forth in *3.5.2.2. "— Exercise of Subscription Rights"*.

3.5.3. Subscription Period

Subscription Rights may be exercised in the period

from August 27, 2021 to September 10, 2021 (in each case inclusive)

(the "**Subscription Period**") through the respective holder's custodian bank at the Bank during regular business hours whereby the receipt of Subscription Price by the Execution Agent will be decisive.

Subscription Rights that are not exercised in due time will expire worthless. No compensation will be paid for Subscription Rights that are not exercised.

3.5.4. Oversubscription

Each shareholder who exercises his or her Subscription Rights in its entirety (other than any residual Subscription Rights that would lead to fractional amounts of New Bonds and are excluded) may (already upon exercise of the Subscription Rights) submit binding purchase orders for further New Bonds ("**Oversubscription**").

The Company will grant shareholders a right to Oversubscription of the New Bonds (the "**Oversubscription Rights**") under the following conditions: Any New Bonds not subscribed for as a result of the Subscription Offer may only be allocated to persons who have exercised their Subscription Rights in their entirety (other than any residual Subscription Rights that would lead to fractional amounts of New Bonds and are excluded). The maximum number of New Bonds that can be registered for Oversubscription corresponds to three times the number of New Bonds for which the respective shareholder or investor has exercised his or her Subscription Rights. In case an Oversubscription cannot be granted at all or not in full to the respective shareholders or investors, the corresponding overpayment will be refunded in due time.

To the extent it is not possible, due to high demand in connection with the Oversubscription, to allocate to all shareholders all of the New Bonds for which they have registered for Oversubscription, binding purchase orders for New Bonds made in connection with the Oversubscription will be allocated in proportion to the ratio of the aggregate number of New Bonds available for Oversubscription (*i.e.*, any New Bonds not subscribed for as a result of the Subscription Offer) to the aggregate number of New Bonds for which shareholders have registered for Oversubscription. To the extent that the allocation of New Bonds in connection with the Oversubscription would result in an allocation of fractions of New Bonds, the mathematical fractions will be rounded down to a full number. With regard to any resulting fractions, the shareholders shall have no claim to delivery of New Bonds or cash settlement.

The purchase price for the New Bonds to be acquired in connection with the Oversubscription will be the Subscription Price (see *3.5.1. "— Subscription Ratio and Subscription Price"*).

If all holders of Subscription Rights exercise their Subscription Rights and no Subscription Right fractions arise due to the exercise, an Oversubscription cannot be granted. An Oversubscription is only possible for whole New Bonds with a nominal amount of EUR 100.00 each.

Shareholders may submit binding purchase orders in connection with the Oversubscription for additional New Bonds to the Execution Agent via their respective custodian bank during regular business hours within the Subscription Period (see *3.5.3. "— Subscription Period"*). Shareholders are requested to use the order form provided by the custodian banks for this purpose. Binding

purchase orders for New Bonds as part of the Oversubscription shall only be taken into account if the Oversubscription declaration, as well as the corresponding purchase price are received by the Execution Agent by no later than the last day of the Subscription Period.

3.5.5. Backstop Agreement

On June 11, 2021, the Company entered into a subscription and backstop agreement with its shareholder Deutsche Balaton Aktiengesellschaft, Ziegelhäuser Landstraße 1, 69120 Heidelberg, Germany ("**Deutsche Balaton**"), which was amended on August 20, 2021 and in which Deutsche Balaton undertook, subject to certain conditions, *vis-à-vis* the Company to acquire New Bonds in a total nominal amount of up to EUR 16,500,000.00 by exercising its share of the Subscription Rights in its entirety and, in addition, by acquiring at the Subscription Price all New Bonds for which Subscription Rights and Oversubscription Rights have not been exercised by the end of the Subscription Period (as amended from time to time, the "**Backstop Agreement 2021**"). Deutsche Balaton shall acquire any New Bonds under the Backstop Agreement 2021 by way of a direct subscription (*i.e.*, Deutsche Balaton shall acquire such New Bonds directly from the Company and not from the Bank).

For further details, see *11.2.2. "Material Agreements — The New Bonds — Backstop Agreement with Deutsche Balaton in 2021"*.

3.5.6. Termination of the Subscription Offer

The Company and the Bank are entitled to terminate the Subscription Offer at any time, even after expiry of the Subscription Period and until delivery of the New Bonds, if (i) the issue of the New Bonds is inadmissible or impossible for legal reasons, or (ii) the Executive Board and the Supervisory Board come to the conclusion that the implementation of the Subscription Offer is no longer in the Company's interest. Furthermore, the Subscription Agent is entitled, under certain conditions, to withdraw from the Subscription Agreement. These circumstances include, but are not limited to material adverse changes in the business or financial conditions of the Company and/or its subsidiary, material restrictions on securities trading or banking activities, the outbreak or escalation of hostilities or war, or the occurrence of acts of terrorism or other disasters or crises that have a material adverse effect on the financial markets in Germany, the United Kingdom or the United States.

In the event of termination of the Subscription Offer, the Subscription Rights (including the Oversubscription Rights) and the purchase orders for the New Bonds will lapse. A termination also applies with regard to Subscription Rights and Oversubscription Rights already exercised. The exercise of Subscription Rights will be reversed. Investors who incurred costs as a result of exercising their Subscription Rights and/or Oversubscription Rights would suffer a loss in this case. A reversal of any trades of Subscription Rights already effected by the Bank will not take place in the event of termination of the Subscription Offer. Investors who have acquired Subscription Rights through a stock exchange would accordingly suffer a loss in this case.

3.6. Dilution

As holders of the New Bonds exercise their conversion rights or these are mandatorily triggered, the shareholding percentage of (other) shareholders in the Company will decline and their voting rights will be diluted through the issuance of new shares of the Company. Under the New Bonds, a total of up to 15,000,000 New Shares (subject to adjustments due to future capital measures, see *4.1.4. "Information about the Securities — Information about the New Bonds — Term and Conversion"*) will be issued as conversion rights are exercised or mandatorily triggered, by no later than September 30, 2027. Based on a number of 12,232,303 outstanding shares of the Company

on the date of the Prospectus, this will ultimately lead to a dilution of 55.1% for shareholders not holding any New Bonds.

In addition, as of the date of the Prospectus, of the subordinated non-interest-bearing mandatory convertible bonds in an aggregate principal amount of EUR 5,500,000.00 issued on February 1, 2021 (the "**Mandatory Convertible Bonds 2021/2024**"), notes in an aggregate principal amount of EUR 701,712.00 are still outstanding which, upon their conversion, will also dilute the shareholding percentage and voting rights of shareholders in the Company.

The net tangible book value (corresponding to total assets less intangible assets less non-current liabilities less current liabilities) derived from the Unaudited Consolidated Interim Financial Statements amounted to EUR 6,292 thousand as of June 30, 2021, which resulted in a net tangible book value per share of EUR 0.53 (rounded and based on 11,823,227 shares as of June 30, 2021). Assuming the issuance and the full conversion of all New Bonds, resulting in 15,000,000 new shares at a conversion price of EUR 1.10, and after deduction of the estimated expenses for the Offering and Listing in the amount of EUR 1.35 million, the net tangible book value of the Company as of June 30, 2021 would amount to EUR 0.80 per share (calculated assuming that 26,823,227 shares of the Company will be outstanding after full conversion of all New Bonds and not taking into account any conversions of outstanding Mandatory Convertible Bonds 2021/2024 since June 30, 2021). This corresponds to an increase of the Company's net tangible book value by EUR 0.27 or 50.2% per Share for the Company's existing shareholders as a result of the conversion of all New Bonds and entails an immediate decrease in net tangible book value per Share for the former holders of the New Bonds of EUR 0.30 or 27.3% per Share, since the net tangible book value per Share is below the conversion price of the New Bonds by this amount or percentage.

3.7. The Engagement Agreement and Subscription Agreement

On July 15, 2021, the Company and the Bank entered into the Engagement Agreement regarding the handling of the execution of the Offering and Listing. Under the Engagement Agreement the Bank has agreed, subject to certain conditions, to conclude the Subscription Agreement and, together with the Company, to apply for admission of the New Shares to trading on the regulated market segment (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and, simultaneously, on the sub-segment thereof with additional post-admission obligations (Prime Standard). An application to this effect was made by the Company and the Bank on August 10, 2021. Under the Subscription Agreement, which was entered into on August 23, 2021, the Bank agrees, subject to certain conditions, to subscribe for the New Bonds to the extent that shareholders have subscribed for the New Bonds, to make the Subscription Offer

The Bank's obligations under the Engagement Agreement and the Subscription Agreement are subject to the occurrence of certain conditions precedent and the non-occurrence of certain material adverse events. In addition, in the Engagement Agreement, the Company has given certain representations and warranties which include the confirmation of the substantive accuracy of the information contained in the Prospectus, and has agreed to indemnify the Bank in case such representations and warranties are incorrect or in case of any misstatement or alleged misstatement contained in the Prospectus or the marketing materials used in the context of the Offering and Listing.

3.8. Lock-Up Commitment and Waiver of Liability by Deutsche Balaton and ABC Beteiligungen AG

Deutsche Balaton and its subsidiary ABC Beteiligungen AG, Heidelberg, have committed to an obligation *vis-à-vis* the Bank that (i) Deutsche Balaton will not dispose of or announce to dispose of or take any measures that are economically equivalent thereto regarding any New Bonds acquired under the Backstop Agreement 2021 or any shares of the Company resulting from the conversion of such New Bonds, as well as at least additional 950,395 shares of the Company, and (ii) ABC Beteiligungen AG will not dispose of or announce to dispose of or take any measures that are economically equivalent thereto regarding at least 233,161 of their shares of the Company. The obligation is valid for a period of six months following the declaration of the deliverability in advance (*vorfristige Lieferbarkeit*) of the New Shares (corresponding to the commencement of trading on the regulated market segment (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*)), which is expected to take place on or about September 17, 2021.

In addition, Deutsche Balaton and ABC Beteiligungen AG have each waived any liability of the Bank that might arise from the Prospectus or the application for admission of the New Shares to a regulated market.

3.9. Interest of Persons Participating in the Offering and Listing

Under the Engagement Agreement and Subscription Agreement, the Bank will receive a fixed commission from the Company. The Company therefore assumes that the Bank has a financial interest in the successful completion of the transaction, which constitutes a potential conflict of interest.

Under the Backstop Agreement 2021, Deutsche Balaton may potentially increase its shareholdings and voting rights in the Company disproportionately, in particular by acquiring at the Subscription Price all New Bonds to which corresponding subscription rights and Oversubscription rights have not been exercised by the end of the Subscription Period.

In addition, Deutsche Balaton and ABC Beteiligungen AG have (i) commited to a lock-up commitment *vis-à-vis* the Bank regarding (a) in case of Deutsche Balaton, any New Bonds acquired under the Backstop Agreement 2021 and any shares of the Company resulting from the conversion of such New Bonds, as well as at least additional 950,395 shares of the Company, and (b) in case of ABC Beteiligungen AG, at least 233,161 shares of the Company, and (ii) waived any liability of the Bank that might arise from the Prospectus or the application for admission of the New Shares to a regulated market (for details, see *3.8. "— Lock-Up Commitment and Waiver of Liability by Deutsche Balaton and ABC Beteiligungen AG"*). The Company therefore assumes that Deutsche Balaton and ABC Beteiligungen AG have a financial and strategic interest in the successful completion of the transaction, which constitutes a potential conflict of interest.

In addition, all members of our Executive Board and our Supervisory Board directly or indirectly hold shares, convertible bonds and/or stock option rights of the Company, and may acquire New Bonds in the Offering, thereby increasing their holdings in the Company in the future. As a result, they may, separately from their positions in the respective governing body, have financial and economic interests in the development of the Company's share price or the Offering or the Listing, which constitutes a potential conflict of interest.

3.10. Proceeds of the Offering and Costs of the Offering and the Listing

The Company will receive proceeds only from the Offering but not from the Listing. Such gross proceeds, assuming full placement of the New Bonds, which is ensured (subject to certain conditions) pursuant to the Backstop Agreement 2021, are expected to amount to EUR 16,500,000.00, corresponding to the volume of the Offering.

The costs of the Company related to the Offering and Listing are expected to total approximately EUR 1.35 million, all of which will be borne by the Company. These costs mainly comprise costs for the preparation of the Prospectus, fees to be paid or paid, respectively, to the Bank and Deutsche Balaton, as well as admission fees and other advisory costs. Of such total costs, EUR 0.7 million had been recorded as of June 30, 2021 and, thus, are reflected in the Unaudited Consolidated Interim Financial Statements.

The Company estimates proceeds to amount to approximately EUR 15.15 million after deduction of the above stated expected costs for the Offering and Listing (net proceeds).

Neither the Company nor the Bank in its capacity as subscription agent will charge expenses to investors. However, investors will themselves be required to bear the fees charged by their brokers or other financial institutions for the purchase and holding of securities.

3.11. Reasons for the Offering and the Listing and Use of Proceeds

The Company intends to use the net proceeds from the Offering primarily (approximately EUR 11.0 million) to finance the development of its product candidate and next-generation blood-based colorectal cancer screening test ("**CRC**"), Epi proColon Next-Gen, by, among other things, initiating a clinical study in the United States, which is required to obtain approval for the test by the U.S. Food and Drug Administration (FDA). The remaining proceeds from the Offering, which are expected to amount to approximately EUR 4.15 million, are intended to be used for general corporate purposes, in particular pursuing the commercialization of its blood-based colorectal cancer screening test Epi proColon.

The Company, together with the Bank, is pursuing the Listing in order to be able to deliver New Shares to the holders of the New Bonds upon conversion which are admitted to trading on the regulated market segment (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) with simultaneous admission to the sub-segment thereof with additional post-admission obligations (Prime Standard).

3.12. Notice to Prospective Investors – United States

The securities have not been approved or disapproved by the U.S. Securities and Exchange Commission (the "**SEC**"), any state securities commission in the United States or any other United States regulatory authority, nor have any of the foregoing authorities passed upon or endorsed the merits of the Offering or the accuracy or adequacy of the Prospectus. Any representation to the contrary is a criminal offense in the United States.

For so long as any of the securities are "restricted securities" as defined in Rule 144(a)(3) under the U.S. Securities Act, the Company will, during any period in which the Company is neither subject to Section 13 or 15(d) of the U.S. Securities Exchange Act of 1934, as amended (the U.S. Exchange Act) nor exempt from reporting under the U.S. Exchange Act pursuant to Rule 12g3-2(b) thereunder, make available to any holder or beneficial owner of such restricted securities or to any prospective investor in such restricted securities designated by such holder or beneficial owner, upon the request

of such holder, beneficial owner or prospective investor, the information required to be delivered pursuant Rule 144A(d)(4) under the U.S. Securities Act.

In the United States, the Prospectus is being furnished on a confidential basis solely for the purpose of enabling by shareholders of record at the end of August 30, 2021 who are resident of the United States to consider whether or not to exercise applicable subscription rights. Distribution of the Prospectus to any person other than the shareholder of record specified by the Company and those persons, if any, retained to advise such offeree with respect thereto, is unauthorized, and any disclosure of its contents, without the Company's prior written consent, is prohibited. The Prospectus is personal to each such shareholder of record and does not constitute an offer to any other person in the United States or to the public generally in the United States to subscribe for or otherwise acquire the securities described herein. Investors agree to the foregoing by accepting delivery of the Prospectus.

4. INFORMATION ABOUT THE SECURITIES

4.1. Information about the New Bonds

4.1.1. Overview

The New Bonds will be non-interest-bearing subordinated mandatory convertible bearer bonds in the aggregate principal amount of up to EUR 16,500,000.00 and comprise up to 165,000 notes with a nominal amount of EUR 100.00 each. They will be dominated in euro. The New Bonds will be created pursuant to Section 793 German Civil Code (*Bürgerliches Gesetzbuch*) and will be subject to German law.

They will be convertible into up to 15,000,000 shares of the Company (subject to any anti-dilution adjustments). The New Bonds will be non-interest-bearing (zero coupon) and have a term until 2027. In addition to conversion rights for the holders of New Bonds, they will also include a conversion obligation for all outstanding New Bonds not yet converted at maturity. There is generally no repayment of capital. Subject to any anti-dilution adjustments, the conversion price per share is EUR 1.10, *i.e.*, each note with a nominal amount of EUR 100.00 will be convertible into 90 (ninety) Shares.

4.1.2. Seniority and Subordination

Pursuant to the terms and conditions of the New Bonds (see *4.1.11. "— Terms and Conditions of the New Bonds"*), the liabilities of the Company from the New Bonds constitute subordinated and unsecured liabilities subordinated to all liabilities of the Company pursuant to Section 39 para. 1 sentence 1 no. 5 German Insolvency Code (*Insolvenzordnung*) and to all other present and future liabilities of the Company which, under their terms or on the basis of mandatory law, have the same ranking as liabilities pursuant to Section 39 para. 1 sentence 1 no. 5 German Insolvency Code (*Insolvenzordnung*) or take precedence over such liabilities, including liabilities ranked in accordance with Section 38 and Section 39 para. 1 sentence 1 no. 1 to no. 4 German Insolvency Code (*Insolvenzordnung*). The obligations of the Company under the New Bonds have equal priority among themselves. The New Bonds have equal priority in relation to other obligations of the Company that are subordinated in the same way.

A repayment of capital (provided only as an exception under the terms and conditions of the New Bonds) requires that (i) no insolvency event has occurred and no insolvency event continues to exist on the relevant payment date and (ii) the payment of the relevant amount would also not trigger an insolvency event or accelerate its imminent occurrence. Such a payment prohibition may apply independently of and even prior to the commencement of insolvency or liquidation proceedings against the Company and may be valid for an indefinite period and even permanently. An insolvency event in this context has occurred irrespective of the initiation of insolvency proceedings if, with regard to the Company, there is a reason to open insolvency proceedings within the meaning of the German Insolvency Code (*Insolvenzordnung*).

4.1.3. No Payment of Interests

No interest payments are made on the New Bonds (zero coupon).

4.1.4. Term and Conversion

The term of the New Bonds will start on September 14, 2021 and end on September 29, 2027.

The holders of the New Bonds have the right to convert each New Bond into shares of the Company at the conversion price from October 1, 2021 (inclusive) to July 15, 2027 (exclusive) within the first

14 calendar days of each calendar quarter (each a "**Conversion Period**") (the "**Conversion Right**"). If the last day of a Conversion Period is not a business day, a Conversion Period ends on the next business day following such day. In addition, the bondholders may not exercise the Conversion Right during certain excluded periods in temporal proximity of (i) any shareholders' meetings of the Company and (ii) the offer and implementation of certain capital measures of the Company, each as further defined in the terms and conditions of the New Bonds (see *4.1.11. "— Terms and Conditions of the New Bonds"*).

Subject to an adjustment for anti-dilution reasons in accordance with the terms and conditions of the New Bonds (see *4.1.11. "— Terms and Conditions of the New Bonds"*), the conversion price will be EUR 1.10 (the "**Conversion Price**").

Under the terms and conditions of the New Bonds (see *4.1.11. "— Terms and Conditions of the New Bonds"*), the Company is also entitled to issue shares from another conditional capital and to deliver existing shares, subject to certain conditions. In addition, under the terms and conditions of the New Bonds (see *4.1.11. "— Terms and Conditions of the New Bonds"*), the Company does not owe shares that are admitted to trading on a regulated market (*Regulierter Markt*). However, the Company will endeavor to ensure that the Listing takes place prior to delivery of the New Bonds and, if this is not the case, that the New Shares are admitted to trading after their delivery.

For further information on the New Shares, see *4.2. "Information about the Securities — Information about the New Shares"*.

To the extent that the New Bonds have neither been converted nor repurchased and cancelled prior to the maturity date, the holders of New Bonds are obliged at the end of the term, in accordance with the more detailed terms and conditions of the Bonds (see *4.1.11. "— Terms and Conditions of the New Bonds"*), to convert their New Bonds into the number of shares that is calculated by dividing the nominal amount of the New Bonds (EUR 100.00 each) by the then applicable Conversion Price.

In case of any conversion, only whole shares will be delivered. Fractions of a share that may result after dividing the total nominal amount of the New Bonds validly tendered for conversion by a bondholder by the then applicable Conversion Price will not be delivered, and there will be no cash settlement for fractions of shares.

The terms and conditions of the New Bonds provide certain dilution protection for the holders of New Bonds in the event of capital changes (see *4.1.6 "— Dilution Protection"*). However, no adjustment is made in the event of a takeover bid, mandatory offer and/or the occurrence of a change of control with regard to the Company; in these cases, the bondholders also have no right to early conversion (see also *1.6.3. "Risk Factors — Risks Related to the Securities and Shareholder Structure of the Company — Particularly due to our relatively low market capitalization, the market price and trading volume of the Company's shares could fluctuate significantly and shareholders could lose all or part of their investment. As the New Bonds will convert into shares of the Company in 2027 at the latest, holders of the New Bonds are also exposed to the market price risk with respect to the Company's shares and any adverse development regarding the shares will eventually also adversely affect the holders of the New Bonds."*).

4.1.5. Termination Right

Holders of New Bonds are entitled to terminate all or some of their New Bonds and demand their immediate repayment at their nominal amount if the Company announces its inability to meet its financial obligations or ceases to make payments, or if a court opens insolvency proceedings against the Company or the Company applies for or institutes such proceedings or offers (see also, *4.1.2. "— Seniority and Subordination"*).

There are no further rights of termination.

4.1.6. Dilution Protection

The terms and conditions of the New Bonds provide certain dilution protection measures for the holders of New Bonds, which include, among others, the following:

In case the Company were to increase its share capital from the capital reserve or from retained earnings, increase the number of issued shares by reducing the portion of the share capital or reduce its capital on or prior to the last day on which the New Shares are delivered, the Conversion Price shall be adjusted. Moreover, in case the Company were to increase its capital against contributions with subscription rights, the Company may choose to either grant each Bondholder the right to subscribe to such number of New Shares to which he or she would have been entitled had he or she exercised the conversion right immediately prior to the record date or to adjust the Conversion Price accordingly. In case the Company were to issue other securities with pre-emptive rights or to distribute, allot or grant, *inter alia*, assets (including spin-off shares) or cash to its shareholders, the Conversion Price shall be adjusted. In the event of a merger or a split-up of the Company as transferor entity, each Bondholder shall be entitled to receive equivalent rights in the transferee entity(ies). Multiple adjustments or exemptions from the adjustment of the Conversion Price are also provided for in the terms and conditions of the New Bonds. For further details on these dilution protection measures, see also *4.1.11. "— Terms and Conditions of the New Bonds — § 12".*

4.1.7. Certificate

The New Bonds will be represented by a global bond certificate deposited with Clearstream. Definitive certificates representing individual New Bonds will not be issued.

4.1.8. ISIN and WKN

International Securities Identification Number (ISIN)	DE000A3E5UB2
German Securities Code (*Wertpapier-Kenn-Nummer*) (WKN)	A3E5UB2

4.1.9. Transferability, No Listing

The transferability of the New Bonds is restricted neither by law nor by their terms and conditions (see *4.1.11. "— Terms and Conditions of the New Bonds"*), other than certain limitations for residents of certain jurisdictions, including in particular the United States, as set forth in *3.5.2.2. "— Exercise of Subscription Rights"*. The Bonds shall be transferable by appropriate entries in securities accounts in accordance with the applicable rules of the Clearstream.

The Company does not intend to admit the New Bonds to a regulated market or to include the New Bonds in trading on an unregulated market.

4.1.10. Notices

Pursuant to the terms and conditions of the New Bonds (see *4.1.11. "— Terms and Conditions of the New Bonds"*), notices relating to the New Bonds are to be published on the website of the Company (www.epigenomics.com).

4.1.11. Terms and Conditions of the New Bonds

The terms and conditions of the New Bonds are as follows. Please note, that only the German version is legally binding and the English translation is for information purposes only.

NOT FOR DISTRIBUTION IN OR INTO THE UNITED STATES, AUSTRALIA, JAPAN, SOUTH AFRICA OR ANY OTHER JURISDICTION IN WHICH OFFERS OR SALES WOULD BE PROHIBITED BY APPLICABLE LAW

Bedingungen der Pflichtwandelschuldverschreibungen (die "**Anleihebedingungen**")

Terms and Conditions of the Mandatory Convertible Bonds (the "**Terms and Conditions**")

§ 1

ALLGEMEINE BESTIMMUNGEN

§ 1

GENERAL PROVISIONS

(1) *Stückelung; Status*. Die von der Epigenomics Aktiengesellschaft, Berlin, einer nach dem Recht der Bundesrepublik Deutschland gegründeten Aktiengesellschaft (die "Emittentin"), begebenen Pflichtwandelschuldverschreibungen im Gesamtnennbetrag von bis zu EUR 16.500.000,00 (in Worten: Euro sechzehn Millionen fünfhundert Tausend) (der "Gesamtnennbetrag") sind in bis zu 165.000 auf den Inhaber lautenden Teilpflichtwandelschuldverschreibungen im Nennbetrag von jeweils EUR 100,00 (der "Nennbetrag") eingeteilt (die "Schuldverschreibungen" und jeweils eine "Schuldverschreibung").

(1) *Denomination; Status.* The bearer mandatory convertible bonds issued by Epigenomics Aktiengesellschaft, Berlin, a stock corporation incorporated under the laws of the Federal Republic of Germany (the "Issuer"), in the aggregate principal amount of up to EUR 16,500,000.00 (in words: Euro sixteen million five hundred thousand) (the "Aggregate Principal Amount") are divided into up to 165,000 bonds with a principal amount of EUR 100.00 each (the "Principal Amount") (the "Bonds" and each a "Bond").

(2) *Verbriefung*. Die Schuldverschreibungen sind durch eine Globalurkunde (die "Globalurkunde") verbrieft. Die Globalurkunde wird bei Clearstream Banking AG, Frankfurt am Main, Bundesrepublik Deutschland ("Clearstream Frankfurt" oder das "Clearing System"), hinterlegt. Effektive Urkunden über einzelne Schuldverschreibungen werden nicht ausgegeben.

(2) *Global Bond*. The Bonds are represented by a global bond certificate (the "Global Bond"). The Global Bond will be deposited with Clearstream Banking AG, Frankfurt am Main, Federal Republic of Germany ("Clearstream Frankfurt", or the "Clearing System"). Definitive certificates representing individual Bonds shall not be issued.

(3) *Übertragung*. Die Globalurkunde wird von dem Clearing System verwahrt, bis sämtliche Verpflichtungen der Emittentin aus den Schuldverschreibungen erfüllt sind. Die Schuldverschreibungen sind durch entsprechende Depotbuchungen nach Maßgabe der anwendbaren Bestimmungen des Clearing Systems übertragbar.

(3) *Transfer*. The Global Bond will be kept in custody with the Clearing System until all obligations of the Issuer under the Bonds have been satisfied. The Bonds shall be transferable by appropriate entries in securities accounts in accordance with the applicable rules of the Clearing System.

(4) *Anleihegläubiger*. "Anleihegläubiger" bedeutet jeder Inhaber eines Miteigentumsanteils oder anderen Rechts an den Schuldverschreibungen.

(4) *Bondholder*. "Bondholder" means any holder of a proportionate co-ownership or other right in the Bonds.

§ 2

STATUS; NACHRANG

§ 2

STATUS; SUBORDINATION

(1) *Status*. Die Verbindlichkeiten der Emittentin aus den Schuldverschreibungen begründen nachrangige und unbesicherte Verbindlichkeiten, die untereinander und mit allen anderen (nach Maßgabe von § 2(2))

(1) *Status*. The obligations of the Issuer under the Bonds constitute subordinated and unsecured obligations of the Issuer, ranking *pari passu* among themselves and with all

	ebenso nachrangigen Verbindlichkeiten der Emittenten im gleichen Rang stehen.		other equally subordinated obligations (as specified in § 2(2)) of the Issuer
(2)	Im Fall der Insolvenz der Emittentin gehen die Verbindlichkeiten aus den Schuldverschreibungen, entsprechend § 39 Abs. 2 InsO,	(2)	In the event of the insolvency of the Issuer, the obligations under the Bonds shall, in accordance with § 39(2) InsO, be fully subordinated to
	(i) Verbindlichkeiten gemäß § 39 Abs. 1 Satz 1 Nr. 5 InsO, sowie		(i) obligations pursuant to § 39(1) sentence 1 no. 5 InsO, and
	(ii) allen anderen gegenwärtigen und zukünftigen Verbindlichkeiten der Emittentin, die nach ihren Bedingungen oder aufgrund zwingenden Rechts in gleichem Rang mit Verbindlichkeiten gemäß § 39 Abs. 1 Satz 1 Nr. 5 InsO stehen oder solchen Verbindlichkeiten vorgehen, einschließlich Verbindlichkeiten im Rang nach § 38 und § 39 Abs. 1 Satz 1 Nrn. 1 bis 4 InsO,		(ii) all other present and future obligations of the Issuer which pursuant to their terms or mandatory law rank *pari passu* or senior to obligations pursuant to § 39(1) sentence 1 no. 5 InsO, including obligations having rank pursuant to § 38 and § 39(1) sentence 1 nos. 1 to 4 InsO;
	im Rang nach;		
	(die Verbindlichkeiten nach (i) und (ii) die "Vorrangigen Verbindlichkeiten"), Zahlungen auf die Schuldverschreibungen erfolgen in einem solchen Fall solange nicht, bis die Vorrangigen Verbindlichkeiten vollständig befriedigt sind.		(the obligations of the Issuer referred to in (i) and (ii), together the "Senior Ranking Obligations"); in any such event, no amounts shall be payable in respect of the Bonds until the Senior Ranking Obligations have been satisfied in full.
	"InsO" bezeichnet die Insolvenzordnung (InsO) vom 5. Oktober 1994, zuletzt geändert durch Art. 24 Abs. 3 Zweites Finanzmarktnovellierungsgesetz vom 23.6.2017, in der jeweils geltenden Fassung; soweit Bestimmungen der Insolvenzordnung geändert oder ersetzt werden, bezieht sich der Verweis auf Bestimmungen der Insolvenzordnung in diesen Anleihebedingungen auf die geänderten Bestimmungen bzw. die Nachfolgeregelungen.		"InsO" means the German Insolvency Statute (*Insolvenzordnung*) dated October 5, 1994, as amended most recently by Art. 24 (3) of the Second Financial Market Amendment Act dated June 23, 2017, as amended from time to time; to the extent that any provisions of the InsO are amended or replaced, the reference to provisions of the InsO as used in these Terms and Conditions shall refer to such amended provisions or successor provisions from time to time.
(3)	Vor Eröffnung eines Insolvenzverfahrens über das Vermögen der Emittentin haben die Anleihegläubiger aus den Schuldverschreibungen keinen Anspruch auf Rückzahlung des Kapitals, wenn an dem Tag, an dem der betreffende Betrag von Kapital zur Zahlung vorgesehen ist, (i) ein Insolvenzereignis eingetreten ist und an diesem Tag fortbesteht oder (ii) die Zahlung des betreffenden Betrags ein Insolvenzereignis auslösen würde oder dessen drohenden Eintritt beschleunigen würde.	(3)	Prior to the opening of any insolvency proceeding over the assets of the Issuer, the Bondholders have no claims for the repayment of principal if on the date on which the relevant amount of principal is scheduled to be paid, (i) an Insolvency Event has occurred and is continuing on such date, or (ii) the payment of the relevant amount would cause an Insolvency Event or accelerate the imminent occurrence of such Insolvency Event.
	Ein "Insolvenzereignis" ist unabhängig von der Einleitung eines Insolvenzverfahrens		An "Insolvency Event" occurs, regardless of the commencement of any insolvency

eingetreten, wenn im Hinblick auf die Emittentin ein Eröffnungsgrund für ein Insolvenzverfahren im Sinne der InsO vorliegt. Gemäß den am Tag der Begebung der Schuldverschreibungen geltenden InsO sind folgende Eröffnungsgründe möglich: An dem betreffenden Tag (i) ist die Emittentin überschuldet im Sinne von § 19 InsO oder (ii) ist die Emittentin zahlungsunfähig im Sinne von § 17 InsO oder (iii) liegt eine drohende Zahlungsunfähigkeit der Emittentin im Sinne von § 18 InsO vor (jedoch unabhängig davon, ob die Eröffnung des Insolvenzverfahrens beantragt wurde).

proceeding, if a reason for the commencement of insolvency proceedings in respect of the Issuer within the meaning of the InsO. Pursuant to the InsO in effect on the date of issue of the Bonds, the following reasons for the commencement of insolvency proceedings apply: on any relevant day, (i) the Issuer is over-indebted (*überschuldet*) within the meaning of § 19 InsO or (ii) the Issuer is illiquid (*zahlungsunfähig*) within the meaning of § 17 InsO or (iii) an imminent illiquidity (*drohende Zahlungsunfähigkeit*) of the Issuer within the meaning of § 18 InsO exists (regardless, however, of whether or not commencement of any insolvency proceedings has been applied for).

(4) ***Hinweis auf vorinsolvenzliches Zahlungsverbot.*** *Gemäß § 2(3) setzt eine Rückzahlung von Kapital voraus, dass (i) kein Insolvenzereignis eingetreten ist und an dem betreffenden Tag kein Insolvenzereignis fortbesteht und (ii) die Zahlung des betreffenden Betrags auch kein Insolvenzereignis auslösen würde oder dessen drohenden Eintritt beschleunigen würde. Ein solches Zahlungsverbot kann unabhängig von und bereits vor Einleitung eines Insolvenz- oder Liquidationsverfahrens gelten und kann für unbestimmte Zeit und sogar dauerhaft gültig sein.*

(4) ***Note on the prohibition on payments applicable prior to an insolvency.*** *Pursuant to § 2(3) a repayment of principal may only be made, if (i) no Insolvency Event has occurred and an Insolvency Event is not continuing on the relevant date, and (ii) the payment of the relevant amount would not cause an Insolvency Event or accelerate the imminent occurrence of such Insolvency Event, either. Such a prohibition on payments may be in effect, irrespective of, and even prior to, the commencement of any insolvency or liquidation proceedings and may be effective for an indefinite period of time and even permanently.*

§ 3

KEINE VERZINSUNG

Die Schuldverschreibungen werden nicht verzinst.

§ 3

NO INTEREST

The Bonds will not bear interest.

§ 4

RÜCKKAUF

Die Emittentin und ihre verbundenen Unternehmen sind berechtigt, jederzeit die Schuldverschreibungen im Markt oder anderweitig zu jedem beliebigen Preis zu kaufen. Die von der Emittentin oder eines ihrer verbundenen Unternehmen erworbenen Schuldverschreibungen können nach Wahl der Emittentin oder des verbundenen Unternehmens gehalten, weiterverkauft oder bei der Wandlungsstelle zwecks Entwertung eingereicht werden.

§ 4

REPURCHASE

The Issuer and any of its affiliates are entitled, at any time, to purchase Bonds in the open market or otherwise at any price. Bonds purchased by the Issuer or any of its affiliates may, at the option of the Issuer or the affiliate, be held, resold or surrendered to the Conversion Agent for cancellation.

§ 5

ZAHLUNGEN

(1) Alle Zahlungen auf die Schuldverschreibungen erfolgen in Euro an die Zahlstelle zur Weiterleitung an das Clearing System. Zahlungen der Emittentin an das Clearing System oder an dessen Order

§ 5

PAYMENTS

(1) All payments on the Bonds will be made in euro to the Paying Agent for transfer to the Clearing System. Payments made by the Issuer to the Clearing System or to its order shall discharge the liability of the Issuer

befreien die Emittentin in Höhe der geleisteten Zahlungen von ihren Verbindlichkeiten aus den Schuldverschreibungen.

under the Bonds to the extent of the sums so paid.

(2) Falls eine Zahlung in Bezug auf die Schuldverschreibungen an einem Tag fällig wird, der kein Geschäftstag ist (wie in § 8(2) definiert), so hat der Anleihegläubiger keinen Anspruch auf Zahlung vor dem nachfolgenden Geschäftstag. In diesem Fall stehen den Anleihegläubigern keine Ansprüche auf Zinsen oder eine andere Ersatzleistung wegen dieser Verzögerung zu.

(2) If the due date for payment of any amount in respect of the Bonds is not a Business Day (as defined in § 8(2)), then the Bondholder will not be entitled to payment until the next day which is a Business Day. In such case the Bondholders shall not be entitled to interest or to any other compensation on account of such delay.

§ 6

STEUERN

§ 6

TAXES

Sämtliche auf die Schuldverschreibungen zu zahlenden Beträge werden unter Abzug von Steuern oder sonstigen Abgaben geleistet, falls ein solcher Abzug gesetzlich vorgeschrieben ist.

All payments in respect of the Bonds will be made with deduction of taxes or other duties, if such deduction is required by law.

Die Emittentin ist nicht verpflichtet, wegen eines solchen Abzugs zusätzliche Beträge an Kapital zu zahlen.

The Issuer will not be obliged to pay any additional amounts of principal as a result of such deduction.

§ 7

PFLICHTWANDLUNG

§ 7

MANDATORY CONVERSION

(1) *Pflicht zur Wandlung*. Sofern nicht vorzeitig gemäß § 8 gewandelt, wird jede noch ausstehende Schuldverschreibung am 30. September 2027 (der "Pflichtwandlungstag") in Aktien (wie in § 8(1) definiert) zum Wandlungspreis (wie in § 8(1) definiert) gemäß den nachfolgenden Bestimmungen von diesem § 7 gewandelt (die "Pflichtwandlung"). Die Anzahl der zu liefernden Aktien (wie in § 8(1) definiert) je Schuldverschreibung richtet sich nach § 9(3).

(1) *Obligation to Convert*. Unless previously converted pursuant to § 8, on 30 September 2027 (the "Mandatory Conversion Date"), each Bond still outstanding shall be mandatorily converted into Shares (as defined in § 8(1)) at the Conversion Price (as defined in § 8(1)) in accordance with the following provisions of this § 7 (the "Mandatory Conversion"). The number of Shares (as defined in § 8(1)) to be delivered shall be determined in accordance with § 9(3).

(2) *Keine Rückzahlung der Schuldverschreibungen*. Die Lieferung der Aktien infolge Pflichtwandlung erfolgt anstatt der Leistung irgendeiner Kapitalrückzahlung auf die Schuldverschreibungen und befreit die Emittentin von der entsprechenden Verpflichtung, den Nennbetrag der Schuldverschreibungen in bar zurückzuzahlen. Demgemäß hat ein Anleihegläubiger mit Wirkung zum Beginn des Pflichtwandlungstag keine weiteren Rechte aus den Schuldverschreibungen mit Ausnahme des Anspruchs auf Lieferung von Aktien gemäß § 10(1). Keine Pflichtwandlung erfolgt hinsichtlich solcher Schuldverschreibungen, die (i) ein Anleihegläubiger gemäß § 15 zur Rückzahlung fällig gestellt hat oder (ii) von der Emittentin gehalten werden. Schuldverschreibungen, die von der

(2) *No Redemption of the Bonds*. The delivery of Shares following a Mandatory Conversion is made in lieu of any payment of principal of the Bonds and shall constitute a discharge of the Issuer from its corresponding obligation to redeem the Principal Amount of the Bonds in cash. Accordingly, as from the beginning of the Mandatory Conversion Date, a Bondholder shall not have any rights in relation to the Bonds other than the right to have Shares delivered pursuant to § 10(1). The Mandatory Conversion shall not apply to Bonds that (i) have been declared due by Bondholders pursuant to § 15, or (ii) are held by the Issuer. Bonds held by the Issuer shall be cancelled by the Issuer no later than five Business Days prior to the Mandatory Conversion Date.

Emittentin gehalten werden, sind durch die Emittentin spätestens fünf Geschäftstage vor dem Pflichtwandlungstag zu entwerten.

(3) *Durchführung der Pflichtwandlung*. Zur Durchführung der Pflichtwandlung müssen die Schuldverschreibungen, für die die Pflichtwandlung durchgeführt wird, jeweils spätestens am Pflichtwandlungstag (jedoch nicht vor dem 15. Juli 2027) der Wandlungsstelle durch die Anleihegläubiger über die betreffende Depotbank übergeben werden. Die Schuldverschreibungen werden an die Wandlungsstelle zur Verwahrung für Rechnung des Anleihegläubigers und Weiterleitung an die Emittentin übergeben.

Jeder Anleihegläubiger beauftragt und bevollmächtigt die Wandlungsstelle, die Pflichtwandlung der übergebenen Schuldverschreibungen in Aktien durchzuführen. Der Anleihegläubiger ermächtigt die Wandlungsstelle insbesondere, die Bezugserklärung gemäß § 198 Absatz 1 Aktiengesetz (das "AktG") abzugeben.

Die Wandlungsstelle ist ferner ermächtigt, aber nicht gegenüber der Anleihegläubigern verpflichtet, die Schuldverschreibungen aus einem vom Anleihegläubiger bei Clearstream Frankfurt oder der jeweiligen Depotbank unterhaltenen Depot zu entnehmen und auf ein von der Wandlungsstelle unterhaltenes Depot zu übertragen (soweit der Wandlungsstelle die Schuldverschreibungen nicht bereits anderweitig gemäß diesem § 7(3) übertragen wurden).

Die Wandlungsstelle ist von den Beschränkungen des § 181 Bürgerliches Gesetzbuch ("BGB") und vergleichbaren Beschränkungen nach einem ggf. anwendbaren ausländischen Recht befreit.

Mit dem Erwerb der Schuldverschreibung durch den Anleihegläubiger und deren Verbuchung auf einem Depot des Anleihegläubigers ist die betreffende Depotbank ermächtigt, in jedem Fall ohne vorherige gesonderte Benachrichtigung des Anleihegläubigers von der Pflichtwandlung betroffene Schuldverschreibungen, auf ein Depot der Wandlungsstelle zu übertragen. Die jeweilige Depotbank ist ferner ermächtigt, alle sonstigen Handlungen vorzunehmen und Erklärungen abzugeben, einschließlich der Bezugserklärung gemäß § 198 AktG und der Weitergabe von in § 9(1) aufgeführten Daten und Angaben, soweit dies zur Herbeiführung der Wandlung erforderlich ist. Die Depotbank ist ferner ermächtigt, Untervollmacht zu erteilen. Diese Ermächtigung ist unbedingt

(3) *Execution of the Mandatory Conversion*. For the purpose of the Mandatory Conversion, the Bonds to be mandatorily converted must be transferred by the Bondholders to the Conversion Agent in each case through the relevant Custodian no later than on the Mandatory Conversion Date (but not prior to 15 July 2027). The Bonds shall be transferred to the Conversion Agent to be held for the account of the Bondholder for transfer to the Issuer.

Each Bondholder instructs and authorizes the Conversion Agent to mandatorily convert the delivered Bonds into Shares. In particular, each Bondholder authorizes the Conversion Agent to issue the Subscription Certificate pursuant to § 198(1) of the German Stock Corporation Act (*Aktiengesetz* – "AktG") on behalf of the Bondholder.

The Conversion Agent is also authorized (but not obliged vis-à-vis the Bonderholders) to draw down the Bonds from a securities account held by the Bondholder at Clearstream Frankfurt or the respective Custodian and to transfer them to a securities account maintained by the Conversion Agent (to the extent the Bonds shall have not been transferred to the Conversion Agent already otherwise in accordance with this § 7(3)).

The Conversion Agent is exempt from the restrictions of § 181 of the German Civil Code (*Bürgerliches Gesetzbuch* – "BGB") and similar restrictions that may be applicable under foreign law.

Upon the acquisition of the Bonds by the Bondholder and their booking to a securities account of the Bondholder, the respective Custodian of the Bondholder is authorized to transfer Bonds subject to a Mandatory Conversion to a securities account of the Conversion Agent, in each case without prior notification of the Bondholder. The respective Custodian is further authorized to take all other actions and make all other declarations, including the issue of the Subscription Certificate pursuant to § 198 AktG and the disclosure of data and information listed in § 9(1), to the extent required to effect the conversion. The Custodian is also authorized to grant sub-authorization. This authorization is

und unwiderruflich und wirkt gegenüber jedem Anleihegläubiger.	unconditional and irrevocable and is binding on each Bondholder.
Für den Fall, dass der Pflichtwandlungstag in einen Ausschlusszeitraum (wie in § 8(3) definiert) fallen würde, ist der Pflichtwandlungstag der erste Geschäftstag (wie in § 8(2) definiert) nach dem Ende des betreffenden Ausschlusszeitraums, ohne dass für diesen zusätzlichen Zeitraum Verzugszinsen oder eine sonstige Entschädigung geschuldet werden.	If the Mandatory Conversion Date falls within an Excluded Period (as defined in § 8(3)), the Mandatory Conversion Date shall be the first Business Day (as defined in § 8(2)) after such period without any default interest or other compensation being due for such additional period.
"Depotbank" meint jede Bank oder ein sonstiges Finanzinstitut, das berechtigt ist, das Wertpapierverwahrungsgeschäft zu betreiben, und bei der/dem der Anleihegläubiger ein Wertpapierdepot für die Schuldverschreibungen unterhält, einschließlich des Clearing Systems.	"Custodian" means any bank or other financial institution authorized to engage in securities custody business with which the Bondholder maintains a securities account in respect of the Bonds and includes the Clearing System.
(4) *Lieferung nach dem Pflichtwandlungstag; kein Ausgleich von Bruchteilen*. Im Fall der Pflichtwandlung werden Aktien am oder alsbald nach dem Pflichtwandlungstag gemäß den Bestimmungen des § 10 geliefert, in jedem Fall jedoch nur für solche Schuldverschreibungen, für die die Pflichtwandlung durchgeführt worden ist (vorbehaltlich einer vorherigen Wahlwandlung gemäß § 8 und § 9). Für etwaige verbleibende Bruchteile von Aktien wird kein Ausgleich in Geld oder ein anderer Ausgleich gewährt.	(4) *Delivery after the Mandatory Conversion Date; No Compensation for Fractions*. In case of the Mandatory Conversion, Shares shall be delivered on or as soon as practicable after the Mandatory Conversion Date in accordance with § 10, in each case, however, only in respect of those Bonds for which the Mandatory Conversion shall have been effected (subject to a prior voluntary conversion in accordance with § 8 and § 9). Any remaining fractions of Shares will not be compensated in cash nor otherwise.
(5) *Erlöschen von Ansprüchen nach Pflichtwandlung*. Im Falle der Pflichtwandlung gilt das Wandlungsrecht als zum Pflichtwandlungstag ausgeübt. Nach der Pflichtwandlung kann der Anleihegläubiger nur noch die Lieferung von Aktien verlangen. Insbesondere erlischt (i) jeglicher Anspruch auf Anpassung des Wandlungspreises gemäß § 12 mit Beginn des Pflichtwandlungstags, und (ii) jegliches Kündigungsrecht des Anleihegläubigers gemäß § 15 mit Beginn des Pflichtwandlungstags.	(5) *Cancellation of Claims following Mandatory Conversion*. In the case of a Mandatory Conversion, the conversion right is deemed to have been exercised with effect as of the Mandatory Conversion Date. Upon the Mandatory Conversion, the rights of the Bondholders are limited to the delivery of shares. In particular, (i) any claim for the adjustment of the Conversion Price pursuant to § 12 will expire at the beginning of the Mandatory Conversion Date, and (ii) any termination right of the Bondholder pursuant to § 15 will expire at the beginning of the Mandatory Conversion Date.
Sofern ein Anleihegläubiger seinen Verpflichtungen und den Anforderungen nach diesem § 7 nicht rechtzeitig nachgekommen ist und die Emittentin in der Folge gehindert ist, Aktien gemäß § 10 und § 11 an diesen Anleihegläubiger im Wege der Pflichtwandlung zu liefern, kann dieser Anleihegläubiger die Erfüllung dieser Verpflichtungen und Anforderungen innerhalb einer Nachfrist von zwanzig (20) Geschäftstagen nach dem Pflichtwandlungstag nachholen; anderenfalls wird der Nennbetrag der betreffenden	If a Bondholder has not complied with its obligations and requirements in accordance with this § 7 and the Issuer is consequently precluded to issue Shares to such Bondholder in accordance with § 10 and § 11 in the course of the Mandatory Conversion, such Bondholder may comply witch such obligations and requirements within a grace period of twenty (20) Business Days following the Mandatory Conversion Date; otherwise the Principal Amount of the relevant Bonds will be written down to zero and the relevant Bonds are cancelled, in

	Schuldverschreibungen auf null herabgeschrieben und die betreffenden Schuldverschreibungen werden entwertet, und zwar jeweils mit Wirkung zu dem Geschäftstag, der unmittelbar auf diese Nachfrist folgt.		each case with effect as of the Business Day immediately following such grace period.
(6)	Auf die Pflichtwandlung finden im Übrigen die Regelung über die Wahlwandlung durch den Anleihegläubiger gemäß § 8 und § 9 entsprechend Anwendung.	(6)	In other respects the provisions according to § 8 and § 9 regarding the voluntary conversion by the Bondholders shall apply *mutatis mutandis* to the Mandatory Conversion.
	§ 8 **WAHLWANDLUNG**		**§ 8** **VOLUNTARY CONVERSION**
(1)	*Wandlungsrecht*. Jeder Anleihegläubiger hat in Bezug auf eine Schuldverschreibung das Recht (das "Wandlungsrecht"), gemäß den Bestimmungen dieses § 8 jederzeit während eines Wandlungszeitraums (wie in § 8(2) definiert) jede Schuldverschreibung ganz, nicht jedoch teilweise, zum Wandlungspreis in auf den Namen lautende Stammaktien (Stückaktie ohne Nennbetrag) der Emittentin mit einem auf eine Aktie entfallenden anteiligen Betrag des Grundkapitals der Emittentin von EUR 1,00 zu wandeln (die "Aktien"). Die Anzahl der zu liefernden Aktien je Schuldverschreibung richtet sich nach § 9(3). Der Wandlungspreis entspricht anfänglich EUR 1,10 und unterliegt gegebenenfalls Anpassungen gemäß § 12 (der, gegebenenfalls angepasste, Wandlungspreis nachstehend der "Wandlungspreis"). Die Lieferung der Aktien erfolgt gemäß § 10.	(1)	*Conversion Right*. Each Bondholder has the right (the "Conversion Right") in relation to one Bond to convert each Bond in whole, but not in part, at any time during a Conversion Period (as defined in § 8(2)) at the Conversion Price into ordinary registered shares (non-par value shares) of the Issuer with a portion of the share capital allotted to each Share of EUR 1.00 per share (the "Shares") as is stipulated in § 9(3). The initial conversion price is equal to EUR 1.10 and is subject to adjustments pursuant to § 12 (the conversion price adjusted from time to time, the "Conversion Price"). Delivery of Shares shall be made in accordance with § 10.
(2)	*Wandlungszeiträume*. Das Wandlungsrecht kann vorbehaltlich § 8(3) durch einen Anleihegläubiger ab dem 1. Oktober 2021 (einschließlich) bis zum 15. Juli 2027 (ausschließlich) jeweils innerhalb der ersten 14 Kalendertage eines jeden Kalenderquartals (jeder solcher Zeitraum ein "Wandlungszeitraum") ausgeübt werden.	(2)	*Conversion Periods*. Subject to the provisions of § 8(3), the Conversion Right may be exercised by a Bondholder from (and including) 1 October 2021 until (and excluding) 15 July 2027 during the first 14 calendar days of each calendar quarter (each such period a "Conversion Period").
	Ist der letzte Tag eines Wandlungszeitraums kein Geschäftstag, so endet betreffende Wandlungszeitraum mit Ablauf des ersten nachfolgenden Tages, der ein Geschäftstag ist. Fällt der letzte Tag eines Wandlungszeitraums in einen Ausschlusszeitraum (wie in § 8(3) definiert), so endet der betreffende Wandlungszeitraum am letzten Tag vor dem Beginn des betreffenden Ausschlusszeitraums, der ein Geschäftstag ist.		If the last day of a Conversion Period falls on a day which is a not a Business Day, the relevant Conversion Period shall terminate on the first day following such day which is a Business Day. If the last day of a Conversion Period falls in an Excluded Period (as defined in § 8(3)), the relevant Conversion Period shall terminate on the last day prior to the commencement of such Excluded Period which is a Business Day.
	In diesen Anleihebedingungen bezeichnet "Geschäftstag" jeden Tag, an dem Banken in Frankfurt am Main für den Geschäftsverkehr		In these Terms and Conditions "Business Day" means each day on which banks in Frankfurt am Main are open for business and

geöffnet sind und Zahlungen in Euro über das Trans European Automated Real-time Gross settlement Express Transfer system 2 (TARGET2) abgewickelt werden können.

(3) *Ausschlusszeitraum*. Die Ausübung des Wandlungsrechts ist während der nachfolgenden Zeiträume (jeweils ein "Ausschlusszeitraum") ausgeschlossen:

(a) anlässlich von Hauptversammlungen der Emittentin während des Zeitraums, der am fünften Geschäftstag vor dem letzten für die Anmeldung zur Teilnahme an der Hauptversammlung der Emittentin bestimmten Tag beginnt und am Geschäftstag nach der Hauptversammlung bzw. im Falle einer Dividendenzahlung am betreffenden Ex Tag (wie in § 12(13) definiert) endet;

(b) während des Zeitraums ab dem Tag, an dem die Emittentin ein Bezugsangebot an ihre Aktionäre zum Bezug von Aktien, Optionsrechten auf eigene Aktien oder Wandelschuldverschreibungen, Optionsscheinen mit Options- oder Wandlungsrechten oder -pflichten, Gewinnschuldverschreibungen oder Genussrechten oder ein ähnliches Angebot im Bundesanzeiger veröffentlicht, bis zum letzten Tag der für die Ausübung des Bezugsrechts jeweils bestimmten Frist (jeweils einschließlich).

§ 9

AUSÜBUNG DES WANDLUNGSRECHTS

(1) *Wandlungserklärung*. Zur Ausübung des Wandlungsrechts muss ein Anleihegläubiger während eines Wandlungszeitraums auf eigene Kosten während der üblichen Geschäftszeiten an einem Geschäftstag bei der Wandlungsstelle (wie in § 14(1) definiert) über seine Depotbank eine durch den Anleihegläubiger ordnungsgemäß ausgefüllte und unterzeichnete Erklärung (die "Wandlungserklärung") unter Verwendung eines zu diesem Zeitpunkt gültigen Vordrucks, der bei der Wandlungsstelle erhältlich ist, einreichen. Eine von der Wandlungsstelle nach 16:00 Uhr (Frankfurter Zeit) erhaltene Wandlungserklärung wird von der Wandlungsstelle erst am unmittelbar darauffolgenden Geschäftstag gemäß § 9(3) geprüft; der Wandlungstag (wie in § 9(4) definiert) verschiebt sich entsprechend. Die Wandlungserklärung ist unwiderruflich. Die

payments in Euro can be settled through the Trans-European Automated Real-time Gross settlement Express Transfer system 2 (TARGET2).

(3) *Excluded Period*. The exercise of the Conversion Right shall be excluded during any of the following periods (each an "Excluded Period"):

(a) in connection with any shareholders' meeting of the Issuer, a period commencing on the fifth Business Day prior to the last day for notification of participation in the shareholders' meeting of the Issuer and ending on the Business Day following such shareholders' meeting or in the event of a payment of dividends on the relevant Ex Date (as defined in § 12(13));

(b) a period commencing on the date on which an offer by the Issuer to its shareholders by way of a rights offering to subscribe to shares, option rights on own shares or convertible bonds, warrants with option or conversion rights or obligations, profit-linked bonds or profit participation rights or any similar offer is published in the German Federal Gazette, and ending on the last day of the relevant subscription period (both dates inclusive).

§ 9

EXERCISE OF CONVERSION RIGHT

(1) *Conversion Notice*. To exercise the Conversion Right, the Bondholder must deliver through his Custodian to the Conversion Agent (as defined in § 14(1)) at its own expense during normal business hours on a Business Day during a Conversion Period a duly completed and signed notice by the Bondholder (the "Conversion Notice") using a form (as amended from time to time) available from the Conversion Agent. A Conversion Notice received by the Conversion Agent after 4:00 p.m. (Frankfurt time) will only be reviewed pursuant to § 9(3) on the immediately succeeding Business Day; the Conversion Date (as defined in § 9(4)) will be delayed accordingly. Conversion Notices shall be irrevocable. The Conversion Notice shall:

	Wandlungserklärung hat unter anderem die folgenden Angaben zu enthalten:	
	- soweit es sich bei den ausübenden Anleihegläubigern um natürliche Personen handelt, ihren Namen, ihre Anschrift und ihr Geburtsdatum, soweit es sich um juristische Personen handelt, ihre Firma, ihre Geschäftsanschrift und ihren Sitz, sowie in jedem Fall ihre Emailadresse, sofern sie eine haben; vorstehende Angaben müssen vollständig sein;	- in case of exercising Bondholders being an individual, their name, address and date of birth, or in case of legal entities, their company name, business address and registered offices, and in each case their e-mail address if they have one; these declarations must be complete;
	- die Zahl der Schuldverschreibungen, für die das Wandlungsrecht ausgeübt werden soll;	- specify the number of Bonds for which the Conversion Right shall be exercised;
	- die Bezeichnung des Wertpapierdepots des Anleihegläubigers oder seiner Depotbank, auf das die Aktien geliefert werden sollen;	- designate the securities deposit account of the Bondholder or its Custodian, to which the Shares are to be delivered;
	- ein auf Euro lautendes Konto des Anleihegläubigers oder seiner Depotbank bei seiner Depotbank, auf welches etwaige Zahlungen geleistet werden sollen;	- specify a Euro-denominated account of the Bondholder or its Custodian at its Custodian to which payments, if any, are to be made;
	- die Ermächtigung der Wandlungsstelle, die Bezugserklärung gemäß § 9(2) für den Anleihegläubiger abzugeben; und	- contain the authorization to deliver the subscription certificate in accordance with § 9(2) on behalf of the Bondholder; and
	- etwaige in dem in diesem Zeitpunkt gültigen Vordruck der Wandlungserklärung geforderte Bestätigungen und Verpflichtungserklärungen im Hinblick auf bestimmte Beschränkungen der Inhaberschaft der Schuldverschreibungen und/oder der Aktien. Sofern der Anleihegläubiger die vorstehend genannten Bestätigungen und Verpflichtungserklärungen nicht beibringt, wird die Emittentin in Bezug auf die betreffende Wandlungserklärung keine Aktien liefern oder Zahlungen leisten.	- contain the certifications and undertakings set out in the then valid form of the Conversion Notice relating to certain restrictions in respect of the ownership of the Bonds and/or the Shares. If the Bondholder fails to deliver the above mentioned certifications and undertakings, the Issuer will not deliver any Shares or pay any amount of cash in respect of such a Conversion Notice.
(2)	*Weitere Voraussetzungen für die Ausübung des Wandlungsrechts*. Die Ausübung des Wandlungsrechts setzt außerdem voraus, dass die Schuldverschreibungen, für die das Wandlungsrecht ausgeübt werden soll, bis spätestens um 16:00 Uhr (Frankfurter Zeit) an dem letzten Tag eines Wandlungszeitraums an die Wandlungsstelle geliefert werden, und zwar durch Übertragung der betreffenden Schuldverschreibungen an die Wandlungsstelle. Die Wandlungsstelle ist ermächtigt, die Bezugserklärung gemäß § 198	(2) *Further Requirements for Exercise of Conversion Right*. The exercise of the Conversion Right shall further require that the Bonds to be converted be delivered to the Conversion Agent by transferring the respective Bond to the Conversion Agent by 4:00 p.m. (Frankfurt time) on the last day of the Conversion Period at the latest. The Conversion Agent is authorised to deliver or to complete the subscription certificate pursuant to § 198(1) AktG on behalf of the Bondholders.

Absatz 1 AktG für die Anleihegläubiger abzugeben oder zu vervollständigen.

Die Wandlungsstelle ist von den Beschränkungen des § 181 Bürgerliches Gesetzbuch ("BGB") und vergleichbaren Beschränkungen nach einem ggf. anwendbaren ausländischen Recht befreit.

The Conversion Agent is exempt from the restrictions of § 181 of the German Civil Code (*Bürgerliches Gesetzbuch* – "BGB") and similar restrictions that may be applicable under foreign law.

(3) *Prüfung der Wandlungserklärung*. Nach Erfüllung sämtlicher in den § 9(1) und (2) genannten Voraussetzungen für die Ausübung des Wandlungsrechts prüft die Wandlungsstelle, ob die Zahl der an die Wandlungsstelle gelieferten Schuldverschreibungen der in der Wandlungserklärung angegebenen Zahl an Schuldverschreibungen entspricht. Bei Abweichungen ist die Zahl der tatsächlich gelieferten Schuldverschreibungen maßgeblich. Jegliche Feststellung, ob eine Wandlungserklärung gemäß § 9(1) und (2) ordnungsgemäß eingereicht wurde und wirksam ist, trifft die Wandlungsstelle nach vorheriger Abstimmung mit der Emittentin; eine solche Feststellung ist für die Emittentin und den betreffenden Anleihegläubiger abschließend und bindend.

(3) *Review of Conversion Notice*. Upon fulfilment of all requirements specified in § 9(1) and (2) for the exercise of the Conversion Right, the Conversion Agent will verify whether the number of Bonds delivered to the Conversion Agent is identical to the number of Bonds specified in the Conversion Notice. In case of discrepancies the number of Bonds effectively delivered is decisive. Any determination as to whether the Conversion Notice has been properly delivered pursuant to, and is valid under, § 9(1) and (2) shall be made by the Conversion Agent upon prior consultation with the Issuer and shall be conclusive and binding upon the Issuer and the relevant Bondholder.

Die Wandlungsstelle errechnet die Anzahl der bei einer Wandlung zu liefernden Aktien durch Division des gesamten Nennbetrags der von einem Anleihegläubiger wirksam zur Wandlung eingereichten Schuldverschreibungen durch den dann gültigen Wandlungspreis, abgerundet auf die nächste ganze Aktie. Ein etwaiger verbleibender Bruchteil einer Aktie wird nicht ausgeglichen und verfällt.

The Conversion Agent will determine the number of Shares to be delivered on conversion by dividing the aggregate Principal Amount of the Bonds delivered for conversion by a Bondholder by the then applicable Conversion Price, rounded down to the next full Share. Any remaining fraction of a Share will not be compensated and will be forfeited.

(4) *Wandlungstag*. Das Wandlungsrecht ist an dem Geschäftstag wirksam ausgeübt, an dem sämtliche in § 9(1) und (2) genannten Voraussetzungen für die Ausübung des Wandlungsrechts erfüllt sind (der "Wandlungstag"). Für den Fall, dass die in § 9(1) und (2) genannten Voraussetzungen an einem Tag erfüllt sind, der in einen Ausschlusszeitraum fällt, ist der Wandlungstag der erste Geschäftstag nach dem Ende dieses Ausschlusszeitraums, soweit auch dieser Tag noch in den betreffenden Wandlungszeitraum fällt; anderenfalls ist das Wandlungsrecht nicht wirksam ausgeübt.

(4) *Conversion Date*. The Conversion Right shall have been validly exercised on the Business Day on which all of the conditions precedent specified in § 9(1) and (2) for the exercise of the Conversion Right have been fulfilled (the "Conversion Date"). In the event that the conditions precedent specified in § 9(1) and (2) are fulfilled on a day which falls within an Excluded Period, then the Conversion Date shall be the first Business Day after the end of such Excluded Period provided that such day still falls within the relevant Conversion Period; otherwise, the Conversion Right shall not have been validly exercised.

§ 10	§ 10
LIEFERUNG DER AKTIEN; BARZAHLUNG STATT LIEFERUNG VON AKTIEN IN BESTIMMTEN FÄLLEN	**DELIVERY OF SHARES; CASH PAYMENT IN LIEU OF DELIVERY OF SHARES IN CERTAIN CIRCUMSTANCES**
(1) *Lieferung der Aktien*. Nach Ausübung des Wandlungsrechts und bei Pflichtwandlung werden ausschließlich ganze Aktien geliefert. Die zu liefernden Aktien werden nach Ausübung des Wandlungsrechts alsbald und spätestens am fünfzehnten Geschäftstag nach dem Wandlungstag (der "Liefertag") bzw. alsbald nach dem Pflichtwandlungstag auf das in der Wandlungserklärung angegebene Wertpapierdepot geliefert. Bis zur Übertragung der Aktien bestehen keine Ansprüche aus den Aktien. Verbleibende Bruchteile von Aktien werden nicht geliefert. Ein Bruchteilsausgleich findet nicht statt.	(1) *Delivery of Shares*. Upon any exercise of the Conversion Right and upon Mandatory Conversion only full Shares shall be delivered. The Shares to be delivered shall be transferred as soon as practicable but no later than on the fifteenth Business Day (the "Settlement Date") after the Conversion Date or as soon as practicable after the Mandatory Conversion Date, respectively, to the securities deposit account designated in the Conversion Notice. Until transfer of the Shares no claims arising from the Shares shall exist. Remaining fractional shares will not be delivered. There shall be no fractional settlement.
(2) *Steuern*. Die Lieferung der Aktien gemäß § 10(1) setzt ferner voraus, dass der Anleihegläubiger etwaige Steuern, Abgaben oder amtliche Gebühren zahlt, die im Zusammenhang mit der Ausübung des Wandlungsrechts bzw. der Pflichtwandlung oder der Lieferung der Aktien gemäß § 10(1) anfallen.	(2) *Taxes*. Delivery of Shares pursuant to § 10(1) is furthermore subject to payment by the Bondholder of any taxes, duties or governmental charges which may be imposed in connection with the exercise of the Conversion Right or the Mandatory Conversion or the delivery of the Shares pursuant to § 10(1).
(3) *Wandlungspreis unter dem auf die einzelne Aktie entfallenden anteiligen Betrag des Grundkapitals*. Soweit eine Anpassung nach § 12 als Ermäßigung des Wandlungspreises anzusehen ist, erfolgt keine solche Anpassung, soweit dadurch der Wandlungspreis unter den auf eine Aktie entfallenden anteiligen Betrag des Grundkapitals der Emittentin herabgesetzt würde.	(3) *Conversion Price below the Portion of the Share Capital of the Issuer Allotted to each Share*. To the extent that any adjustment pursuant to § 12 is to be considered to be a reduction of the Conversion Price, no such adjustment shall be made to the extent that the Conversion Price would thereby be reduced below the portion of the share capital of the Issuer allotted to each Share.
(4) *Barzahlung statt der Lieferung von Aktien in bestimmten Fällen*. (a) Falls und soweit die Emittentin durch zwingende gesetzliche Vorschriften gehindert ist, Aktien aus ihrem bedingten Kapital bei Ausübung des Wandlungsrechts durch Anleihegläubiger bzw. bei Pflichtwandlung zu begeben, und über keine lieferbaren eigenen Aktien verfügt, wird die Emittentin solchen Anleihegläubigern an Stelle der Lieferung der Aktien, auf welche die Anleihegläubiger ansonsten einen Anspruch hätten, aber an deren Ausgabe oder Lieferung die Emittentin gehindert ist, einen Barbetrag in Euro (die "Barzahlung") zahlen.	(4) *Cash Payment in Lieu of Delivery of Shares in Certain Circumstances*. (a) If and to the extent that due to compulsory provisions of law the Issuer is unable to issue Shares from its conditional capital and in addition the Issuer does not hold deliverable treasury Shares upon the exercise of a Conversion Right by any Bondholder or the Mandatory Conversion, the Issuer shall pay to such Bondholder a cash amount in Euro (the "Cash Payment") in lieu of the delivery of the Shares to which such Bondholder is otherwise entitled, but which the Issuer is unable to issue or deliver.

- Die Barzahlung für die gesamten auszugebenden bzw. zu liefernden Aktien errechnet sich aus dem Betrag des arithmetischen Durchschnittskurses der XETRA-Notierungen (wie in § 12(13) definiert) für diese gesamten Aktien innerhalb eines Zeitraums von 15 aufeinanderfolgenden Handelstagen (wie unten definiert) beginnend an dem dritten auf den Benachrichtigungstag (wie in § 10(4) lit. (b) definiert) folgenden Handelstag (der "Berechnungszeitraum"), gerundet auf den nächsten vollen Cent, wobei EUR 0,005 aufgerundet werden.	- The Cash Payment relating to the aggregate number of Shares which would have otherwise been issued or delivered shall be calculated as an amount equal to the arithmetic average of the XETRA-Quotations (as defined in § 12(13)) for such aggregate number of shares on the 15 consecutive Trading Days (as defined below) beginning on the third Trading Day following the Notification Day (as defined in § 10(4)(b)) (the "Calculation Period"), rounded to the nearest full cent with EUR 0.005 being rounded upwards.
- Soweit die Emittentin nur teilweise die Aktien ausgeben bzw. liefern kann, auf die ein Anleihegläubiger nach Ausübung des Wandlungsrechts bzw. bei Pflichtwandlung einen Anspruch hat, wird die Emittentin die Anzahl von Aktien liefern, die sie ausgeben bzw. liefern kann ("Verfügbare Aktien"), und für die Differenz eine Barzahlung, wie oben bestimmt, leisten. In einem solchen Fall nehmen Schuldverschreibungen mit demselben Wandlungstag gleichberechtigt an der Verteilung der verfügbaren Aktien auf einer *pro rata* Basis je Schuldverschreibung teil. Ein Anspruch des Anleihegläubigers auf Lieferung von Bruchteilen von Aktien besteht nicht und wird entsprechend der Barzahlung für Aktien in Geld ausgeglichen.	- In the event that the Issuer is only able to issue or deliver some but not all of the Shares to which a Bondholder having exercised a Conversion Right or upon Mandatory Conversion is entitled, the Issuer will deliver such number of Shares that it is able to issue or deliver ("Available Shares") and make a Cash Payment for the balance as determined above; in such case Bonds with the same Conversion Date shall be entitled to participate equally in the distribution of the available shares on a *pro rata* basis per Bond. Fractions of Shares may not be claimed by the Bondholder and shall be compensated in cash proportional to the Cash Payment per Share.
- Die Barzahlung wird spätestens am zehnten Geschäftstag nach dem letzten Handelstag des Berechnungszeitraums durch die Emittentin geleistet. Auf die Barzahlung sind keine Zinsen zahlbar.	- The Cash Payment shall be effected by the Issuer not later than on the tenth Business Day following the last Trading Day of the Calculation Period. No interest shall be payable with respect to the Cash Payment.
"Handelstag" bezeichnet (i) für die Zwecke der Bestimmung der XETRA-Notierung, jeden Tag, an dem die FWB (wie in § 12(13) definiert) für den Handel geöffnet ist und XETRA-Kurse ermittelt werden, bzw. (ii) für die Zwecke der Bestimmung sonstiger Wertpapier-Kurse, jeden Tag, an dem der Relevante Markt für andere Wertpapiere, Rechte oder sonstige Vermögensgegenstände für den Handel geöffnet ist und Wertpapier-Kurse (wie in	"Trading Day" means (i) for the purpose of determining the XETRA Quotation, each day on which the FSE (as defined in § 12(13)) is open for business and quotations on XETRA are determined, or (ii) for the purpose of determining other Security Prices, each day on which the Relevant Market for any other securities, rights or other assets is open for business and Security Prices

§ 12(13) definiert) ermittelt werden können.

(b) Die Emittentin wird den Anleihegläubiger, der eine Wandlungserklärung eingereicht hat, über die Depotbank des Anleihegläubigers spätestens am fünften Geschäftstag nach dem Wandlungstag bzw. im Falle der Pflichtwandlung spätestens am zweiten Geschäftstag nach dem Pflichtwandlungstag benachrichtigen, ob eine Barzahlung geleistet wird (der Tag, an dem die Emittentin eine solche Nachricht abschickt, wird als "Benachrichtigungstag" bezeichnet).

§ 11
BEREITSTELLUNG VON AKTIEN; DIVIDENDEN

(1) *Bedingtes Kapital; Bereitstellung von Aktien*. Die Aktien werden nach Ausübung des Wandlungsrechts bzw. Durchführung der Pflichtwandlung aus einem bedingten Kapital der Emittentin stammen. Die Emittentin ist jedoch nach ihrem eigenen Ermessen berechtigt, Anleihegläubigern statt neuer Aktien aus ihrem bedingten Kapital bestehende Aktien zum Wandlungspreis zu liefern oder liefern zu lassen, vorausgesetzt, die bestehenden Aktien gehören derselben Gattung wie die ansonsten aus ihrem bedingten Kapital zu liefernden Aktien an, die Lieferung der bestehenden Aktien kann rechtswirksam erfolgen und beeinträchtigt nicht die Rechte des Anleihegläubigers im Vergleich zur Lieferung von Aktien aus bedingtem Kapital. Eine unterschiedliche Dividendenberechtigung (die bei den bestehenden Aktien nicht geringer sein darf als bei den jungen Aktien, die andernfalls an den betreffenden Anleihegläubiger zu liefern wären) steht der Lieferung bestehender Aktien nicht entgegen.

Eine Zulassung der zu liefernden Aktien zum regulierten Markt an der FWB erfolgt gemäß § 69 Abs. 2 Satz 1 Börsenzulassungs-Verordnung spätestens innerhalb eines Jahres ab ihrer Ausgabe. Gelieferte Aktien sind im Zeitpunkt ihrer Lieferung und für einen Zeitraum von bis zum einem Jahr ab ihrer Ausgabe ggf. nicht börslich handelbar; während dieser Zeit verfügen die gelieferten Aktien über eine von den bereits zugelassenen Aktien der Emittentin abweichende Wertpapierkennnummer.

(as defined in § 12(13)) can be determined.

(b) The Issuer shall notify the Bondholder who has delivered an Conversion Notice through the Bondholder's Custodian not later than on the fifth Business Day after the Conversion Date or, in the case of a Mandatory Conversion, not later than on the second Business Day after the Mandatory Conversion Date whether a Cash Payment will be effected (the day on which such notification is dispatched by the Issuer being the "Notification Day").

§ 11
PROCUREMENT OF SHARES; DIVIDENDS

(1) *Conditional Capital; Procurement of Shares*. Upon execution of the Conversion Right or upon effectiveness of the Mandatory Conversion, respectively, the Shares will derive from a conditional capital of the Issuer. However, the Issuer shall at its sole discretion be entitled to deliver (or cause to be delivered) to any Bondholder at the Conversion Price existing Shares rather than new Shares out of its conditional capital, provided that such existing Shares shall be of the same class as the Shares otherwise to be delivered out of conditional capital and that such delivery of existing Shares can be legally effected and does not impair the rights of the relevant Bondholder compared to the delivery of new Shares out of conditional capital. A different dividend entitlement (which for the existing Shares shall be no less than the dividend entitlement of the new Shares that would have otherwise been delivered to the relevant Bondholder) does not prevent the delivery of existing Shares.

In accordance with § 69 (2) first sentence of the German Stock Exchange Admission Regulation (*Börsenzulassungs-Verordnung*), the Shares to be delivered will be admitted to trading on the regulated market of the FSE no later than one year after their issue. Delivered Shares are potentially not tradable on a stock exchange at the time of their delivery and for a period of up to one year after their issue; during such period, the delivered Shares will carry a securities identification number different from the other Shares of the Issuer already admitted to trading.

(2) *Dividendenberechtigung*. Neue Aktien, die nach der Ausübung des Wandlungsrechts bzw. bei Pflichtwandlung aus bedingtem Kapital ausgegeben werden, sind vom Beginn des Geschäftsjahres (wie in § 12(13) definiert) der Emittentin an, in dem die Aktien ausgegeben werden, für dieses und alle folgenden Geschäftsjahre der Emittentin dividendenberechtigt (sofern Dividenden gezahlt werden); soweit neue Aktien jedoch vor der Jahreshauptversammlung der Emittentin, die über die Verwendung des Bilanzgewinns des vorangegangenen Geschäftsjahres beschließt, ausgegeben werden, so gilt die Dividendenberechtigung dieser neuen Aktien auch für das ihrer Ausgabe vorangegangene Geschäftsjahr.

(2) *Dividend Entitlement*. New Shares issued upon exercise of the Conversion Right or Mandatory Conversion, respectively, out of conditional capital shall be entitled to dividends (if any) in respect of the then current and all following Financial Years (as defined in § 12(13)) as from the beginning of the Financial Year of the Issuer in which such Shares are issued; in the event, however, that new Shares are issued prior to the annual general meeting of the Issuer resolving on the appropriation of the net profits of the preceding Financial Year, the new Shares shall be entitled to dividends as from the beginning of the financial year preceding their issuance.

(3) Wenn eine Lieferstörung eintritt und an oder vor dem Liefertag keine Aktien geliefert werden können, dann hat die Emittentin die betreffenden Aktien an dem ersten nachfolgenden Geschäftstag zu liefern, an dem eine Lieferung der bereitzustellenden Aktien durch das Clearing System oder in jeder anderen wirtschaftlich sinnvollen Weise stattfinden kann.

"Lieferstörung" bezeichnet ein Ereignis außerhalb der Kontrolle der Emittentin, das dazu führt, dass das Clearing System Übertragungen von Aktien nicht durchführen kann.

(3) If a Settlement Disruption Event occurs and delivery of any Shares cannot be effected on or before the Settlement Date, then the Issuer is required to deliver the relevant Shares on the first succeeding Business Day on which delivery of the Shares to be procured can take place through the Clearing System or in any other commercially reasonable manner.

"Settlement Disruption Event" means an event beyond the control of the Issuer as a result of which the Clearing System cannot settle transfers of such Shares.

§ 12

VERWÄSSERUNGSSCHUTZ

§ 12

DILUTION ADJUSTMENTS

(1) *Kapitalerhöhung durch Umwandlung der Kapitalrücklage oder von Gewinnrücklagen, Aktiensplitt oder Zusammenlegung von Aktien und Kapitalherabsetzung*.

(a) *Kapitalerhöhung durch Umwandlung der Kapitalrücklage oder von Gewinnrücklagen*. In den Fällen, in denen die Emittentin ihr Grundkapital durch Umwandlung der Kapitalrücklage oder von Gewinnrücklagen an oder vor dem letzten Tag, an dem Aktien gemäß § 10(1) geliefert werden, erhöht, wird der Wandlungspreis gemäß der nachstehenden Formel angepasst:

$$E' = E \times \frac{No}{Nn}$$

wobei:

E' = der angepasste Wandlungspreis,

(1) *Capital Increase from Conversion of the Capital Reserve or Retained Earnings, Share Split or Combining of Shares and Capital Decrease*.

(a) *Capital Increase from Conversion of the Capital Reserve or Retained Earnings*. In cases where the Issuer increases its share capital from the capital reserve or from retained earnings on or prior to the last day on which Shares are delivered pursuant to § 10(1), the Conversion Price shall be adjusted in accordance with the following formula:

$$E' = E \times \frac{No}{Nn}$$

where:

E' = the adjusted Conversion Price,

E = der Wandlungspreis am Stichtag (wie in § 12(13) definiert),

Nn = die Anzahl ausgegebener Aktien nach der Kapitalerhöhung, und

No = die Anzahl ausgegebener Aktien vor der Kapitalerhöhung.

Eine Anpassung des Wandlungspreises findet nicht statt, wenn bei Anwendung der obigen Formel E' größer als E wäre.

Wenn die Grundkapitalerhöhung durch Umwandlung der Kapitalrücklage oder von Gewinnrücklagen nicht durch die Ausgabe neuer Aktien, sondern mittels einer Erhöhung des jeweiligen auf die einzelne Aktie entfallenden anteiligen Betrags des Grundkapitals bewirkt wird (§ 207 Absatz 2 Satz 2 Aktiengesetz), so bleibt der Wandlungspreis bei Ausübung des Wandlungsrechts unverändert. In diesem Fall sind die betreffenden Aktien mit ihrem entsprechend erhöhten anteiligen Betrag des Grundkapitals zu liefern.

Mit einer Grundkapitalerhöhung aus Gesellschaftsmitteln wird zugleich das bedingte Kapital der Emittentin kraft Gesetz im gleichen Umfang wie das Grundkapital erhöht (§ 218 Aktiengesetz).

(b) *Aktiensplitt/Umgekehrter Aktiensplitt oder Zusammenlegung von Aktien*. In den Fällen, in denen die Emittentin an oder vor dem letzten Tag, an dem Aktien gemäß § 10(1) geliefert werden,

(i) die Zahl der ausgegebenen Aktien entweder durch Herabsetzung des auf die einzelne Aktie entfallenden anteiligen Betrags des Grundkapitals erhöht (Aktiensplitt) oder durch Heraufsetzung des auf die einzelne Aktie entfallenden anteiligen Betrags des Grundkapitals ohne Veränderung des Grundkapitals reduziert (umgekehrter Aktiensplitt), oder

(ii) ihr Grundkapital durch Zusammenlegung von Aktien reduziert,

wird der Wandlungspreis unter Anwendung von § 12(1) lit. (a)

E = the Conversion Price on the Record Date (as defined in § 12(13)),

Nn = the number of Shares issued after the capital increase, and

No = the number of Shares issued before the capital increase.

There shall be no adjustment of the Conversion Price if E' would, by applying the above formula, be greater than E.

If the share capital increase from the capital reserve or from retained earnings is not effected by means of the issuance of new shares but by means of an increase of the portion of the share capital allotted to each share (§ 207(2) sentence 2 of the German Stock Corporation Act), the Conversion Price will remain unchanged upon exercise of the Conversion Right. In this case the relevant Shares will be delivered with the increased portion of the share capital allotted to each Share.

Simultaneously with the share capital increase out of capital reserves the conditional capital of the Issuer is increased by operation of law in the same proportion as the share capital (§ 218 of the German Stock Corporation Act).

(b) *Share Split/Reverse Share Split or Combining of Shares*. In cases where the Issuer on or prior to the last day on which Shares are delivered pursuant to § 10(1)

(i) either increases the number of issued Shares by reducing the portion of the share capital allotted to each Share (share split) or decreases the number of issued Shares by increasing the portion of the share capital allotted to each Share with no change in the share capital (reverse share split), or

(ii) reduces its capital by combining its Shares,

the Conversion Price shall be adjusted in accordance with § 12(1)(a) to the

angepasst, soweit sich aus § 12(1) lit. (c) nichts anderes ergibt.

(c) *Kapitalherabsetzung.* Im Falle einer Herabsetzung des Grundkapitals der Emittentin an oder vor dem letzten Tag, an dem Aktien gemäß § 10(1) geliefert werden, allein durch Herabsetzung des auf die einzelne Aktie entfallenden anteiligen Betrags des Grundkapitals ohne Veränderung der Zahl der ausgegebenen Aktien, bleibt, vorbehaltlich § 12(4), der Wandlungspreis unverändert, jedoch mit der Maßgabe, dass nach einem solchen Ereignis zu liefernde Aktien mit ihrem jeweiligen neuen, auf die einzelne Aktie entfallenden anteiligen Betrag des Grundkapitals geliefert werden. Keine Anpassung des Wandlungspreises erfolgt im Fall einer Kapitalherabsetzung durch Einziehung von eigenen Aktien.

extent not otherwise provided for in § 12(1)(c).

(c) *Capital Decrease*. In the event of a decrease in the share capital of the Issuer on or prior to the last day on which Shares are delivered pursuant to § 10(1), which is solely the result of a reduction of the portion of the share capital allotted to each Share without a change in the number of shares issued, the Conversion Price shall, subject to § 12(4), remain unchanged provided that Shares to be delivered after the occurrence of such an event shall be delivered with their respective new portion of the share capital allotted to them. No adjustment of the Conversion Price shall be made in case of a capital decrease by cancelling treasury shares.

(2) *Kapitalerhöhung gegen Einlagen mit Bezugsrecht*. Wenn die Emittentin an oder vor dem letzten Tag, an dem Aktien gemäß § 10(1) geliefert werden, unter Einräumung eines unmittelbaren oder mittelbaren Bezugsrechts an ihre Aktionäre ihr Grundkapital durch Ausgabe neuer Aktien gegen Bareinlagen erhöht (Bezugsrechtsemission) (§§ 182, 186 Aktiengesetz) (ausgenommen eine Scrip-Dividende (wie in § 12(13) lit. (b) definiert)), wird nach Wahl der Emittentin (i) die Emittentin jedem Anleihegläubiger ein Bezugsrecht auf die Anzahl von neuen Aktien einräumen, die der Anleihegläubiger hätte beziehen können, wenn er das Wandlungsrecht unmittelbar vor dem Stichtag (wie in § 12(13) definiert) ausgeübt hätte, oder (ii) der Wandlungspreis gemäß der nachstehenden Formel angepasst:

$$E' = E \times \left(\frac{No}{Nn} x \left(1 - \frac{I + D}{K} \right) + \frac{I + D}{K} \right)$$

wobei:

E' = der angepasste Wandlungspreis,

E = der Wandlungspreis am Stichtag (wie in § 12(13) definiert),

No = die Anzahl ausgegebener Aktien vor der Kapitalerhöhung,

Nn = die Anzahl ausgegebener Aktien nach der Kapitalerhöhung,

I = der Bezugspreis der neuen Aktien,

(2) *Capital Increase against Contributions with Subscription Rights*. If the Issuer on or prior to the last day on which Shares are delivered pursuant to § 10(1) increases its share capital through the issue of new Shares against cash contribution while granting its shareholders a direct or indirect subscription right (rights issue) (§§ 182, 186 of the German Stock Corporation Act) (other than constituting a Scrip Dividend (as defined in § 12(13)(b))), at the election of the Issuer, (i) the Issuer shall grant each Bondholder the right to subscribe to the number of new Shares to which such Bondholder would have been entitled to subscribe had the Bondholder exercised the Conversion Right immediately prior to the Record Date (as defined in § 12(13)), or (ii) the Conversion Price shall be adjusted in accordance with the following formula:

$$E' = E \times \left(\frac{No}{Nn} x \left(1 - \frac{I + D}{K} \right) + \frac{I + D}{K} \right)$$

where:

E' = the adjusted Conversion Price,

E = the Conversion Price on the Record Date (as defined in § 12(13)),

No = the number of Shares issued before the capital increase,

Nn = the number of Shares issued after the capital increase,

I = the issue price of the new Shares,

D = der von der Berechnungsstelle bestimmte Dividendennachteil der neuen Aktien (nicht diskontiert) gegenüber Altaktien an dem Stichtag der Bezugsrechtsemission, der dem von der Berechnungsstelle bestimmten Angemessenen Marktwert (wie in § 12(13) definiert) der betreffenden Dividende, die zu erhalten ein Aktionär der Emittentin je Aktie berechtigt ist, (i) an dem Ex-Tag, sofern deren Ex-Tag vor dem Stichtag der Bezugsrechtsemission liegt, bzw. (ii) an dem Tag der ersten Ankündigung dieser Dividende in allen anderen Fällen, entspricht, und

K = der Durchschnittliche Marktpreis (wie in § 12(13) definiert).

Eine Anpassung des Wandlungspreises findet nicht statt, wenn bei Anwendung der obigen Formel E' größer als E wäre.

(3) *Bezugsrechtsemissionen bezüglich sonstiger Wertpapiere*. In den Fällen, in denen die Emittentin an oder vor dem letzten Tag, an dem Aktien gemäß § 10(1) geliefert werden, ihren Aktionären (i) Bezugsrechte auf eigene Aktien (ausgenommen eine Scrip Dividende (wie in § 12(13) lit. (b) definiert)) gewährt oder (ii) Bezugsrechte auf Wertpapiere mit Bezugs-, Options- oder Wandlungsrechten auf Aktien der Emittentin gewährt (mit Ausnahme der Einräumung von Bezugsrechten im Rahmen von Kapitalerhöhungen nach § 12(2)) oder (iii) Bezugsrechte auf andere Schuldverschreibungen, Genussscheine oder sonstige Wertpapiere der Emittentin (die vorstehend unter (i) bis (iii) genannten Wertpapiere gemeinsam "Sonstige Wertpapiere") gewährt, wird der Wandlungspreis gemäß der nachstehenden Formel angepasst:

$$E' = E \times \frac{M - F}{M}$$

wobei:

E' = der angepasste Wandlungspreis,

E = der Wandlungspreis am Stichtag (wie in § 12(13) definiert),

M = der Durchschnittliche Marktpreis (wie in § 12(13) definiert), und

F = der Angemessene Marktwert (wie in § 12(13) definiert) der unmittelbaren oder mittelbaren Bezugsrechte im Hinblick auf solche Sonstigen Wertpapiere, auf die ein

D = the disadvantage (not discounted) for dividends to which the new Shares are not entitled in relation to old Shares on the Record Date of the rights issue as determined by the Calculation Agent as shall be equal to the Fair Market Value (as defined in § 12(13)), as determined by the Calculation Agent, of such dividend to which a shareholder of the Issuer is entitled per Share as at (i) the Ex Date thereof if such Ex Date is on or prior to the Record Date of the rights issue, or (ii) the date of first announcement of such dividend in all other cases, and

K = the Average Market Price (as defined in § 12(13)).

There shall be no adjustment of the Conversion Price if E' would, by applying the above formula, be greater than E.

(3) *Issue of Other Securities with Pre-emptive Rights*. In cases where the Issuer on or prior to the last day on which Shares are delivered pursuant to § 10(1) grants to its shareholders (i) subscription rights for own Shares (other than constituting a Scrip Dividend (as defined in § 12(13)(b))), or (ii) subscription rights for securities with subscription, option or conversion rights in relation to Shares of the Issuer (but excluding the granting of subscription rights in the course of capital increases pursuant to § 12(2)), or (iii) subscription rights for other debt securities, profit participation certificates or other securities of the Issuer (the securities listed in (i) through (iii) together, "Other Securities"), the Conversion Price shall be adjusted in accordance with the following formula:

$$E' = E \times \frac{M - F}{M}$$

where:

E' = the adjusted Conversion Price,

E = the Conversion Price on the Record Date (as defined in § 12(13)),

M = the Average Market Price (as defined in § 12(13)), and

F = the Fair Market Value (as defined in § 12(13)) of the direct or indirect subscription rights to subscribe for such Other Securities

Aktionär der Emittentin am Ex-Tag je Aktie einen Anspruch hat.

Eine Anpassung des Wandlungspreises erfolgt nicht, wenn F = oder < 0.

(4) *Anpassung für Ausschüttungen*. Falls die Emittentin an oder vor dem letzten Tag, an dem Aktien gemäß § 10(1) geliefert werden, an alle ihre Aktionäre

(i) Vermögen (auch in Form einer Sachdividende) (mit Ausnahme von Bardividenden (wie in § 12(13) definiert) oder Spaltungsaktien (wie in § 12(13) definiert)),

(ii) Verkaufsoptionen im Zusammenhang mit einem Aktienrückkauf,

(iii) Bargeld bei einer Kapitalherabsetzung zwecks Rückzahlung von Teilen des Grundkapitals (in letzterem Fall stellt die Rückzahlung von Bargeld für Zwecke dieses § 12(4) Vermögen dar), oder

(iv) Schuldverschreibungen, Options- oder Wandlungsrechte (mit Ausnahme der oben in § 12(3) genannten Rechte) ausschüttet, gewährt oder verteilt (die Fälle von (i) bis (iv) jeweils eine "Ausschüttung"),

wird der Wandlungspreis gemäß der nachstehenden Formel angepasst:

$$E' = E \times \frac{M - F}{M}$$

wobei:

E' = der angepasste Wandlungspreis,

E = der Wandlungspreis am Stichtag (wie in § 12(13) definiert),

M = der Durchschnittliche Marktpreis (wie in § 12(13) definiert), und

F = (a) im Falle (i), (iii) oder (iv) der Angemessene Marktwert der Ausschüttung, Zuteilung oder Gewährung, die zu erhalten ein Aktionär der Emittentin je Aktie berechtigt ist, an dem Ex-Tag der Ausschüttung, Zuteilung oder Gewährung, und (b) im Falle (ii) der Verkaufsoptionswert der zugeteilten oder gewährten Verkaufsoptionen je Aktie.

to which a shareholder of the Issuer is entitled per Share to as at the Ex Date.

There shall be no adjustment of the Conversion Price if F equals or is < 0.

(4) *Adjustment for Distributions*. If the Issuer on or prior to the last day on which Shares are delivered pursuant to § 10(1) distributes, allots or grants to all its shareholders

(i) assets (also in the form of a dividend in kind) (except for Cash Dividends (as defined in § 12(13) or Spin off Shares (as defined in § 12(13)),

(ii) put options in connection with a repurchase of shares,

(iii) cash upon a capital decrease for the purpose of repaying parts of the share capital (in which case the repayment of cash shall constitute assets for purposes of this § 12(4)), or

(iv) debt securities or option or conversion rights (with the exception of the rights mentioned above in § 12(3)) (each of the cases in (i) through (iv) a "Distribution"),

then the Conversion Price shall be adjusted in accordance with the following formula:

$$E' = E \times \frac{M - F}{M}$$

where:

E' = the adjusted Conversion Price,

E = the Conversion Price on the Record Date (as defined in § 12(13)),

M = the Average Market Price (as defined in § 12(13)), and

F = (a) in case of (i), (iii) or (iv) the Fair Market Value of such distribution, allotment or grant per Share to which a shareholder of the Issuer is entitled per Share as at the Ex Date of such distribution, allotment or grant, and (b) in the case of (ii) the Put Option Value of the put options allotted or granted per Share.

Mehrere Anpassungen nach diesem § 12(4) werden unabhängig und getrennt voneinander durchgeführt und berechnet, selbst wenn die Beschlussfassungen und/oder Ausschüttungen am selben Tag vorgenommen werden.

Several adjustments pursuant to this § 12(4) will be made independently and separately of each other, even if the relevant resolutions and/or distributions are made on the same day.

(5) *Verschmelzung; Aufspaltung*. Im Fall einer Verschmelzung (§ 2 Umwandlungsgesetz) oder einer Aufspaltung (§ 123 Absatz 1 Umwandlungsgesetz) mit der Emittentin als übertragendem Rechtsträger im Sinne des Umwandlungsgesetzes vor dem letzten Tag, an dem Aktien gemäß § 10(1) geliefert werden, hat jeder Anleihegläubiger das Recht auf Gewährung gleichwertiger Rechte an dem übernehmenden Rechtsträger bzw. den übernehmenden Rechtsträgern gemäß § 23 Umwandlungsgesetz bzw. §§ 125, 23 Umwandlungsgesetz.

(5) *Merger; Split-Up*. In the event of a merger (*Verschmelzung*, § 2 of the German Transformation Act) or a split-up (*Aufspaltung*, § 123(1) of the German Transformation Act) of the Issuer as transferor entity within the meaning of the German Transformation Act prior to the last day on which Shares are delivered pursuant to § 10(1), each Bondholder will be entitled to receive equivalent rights in the transferee entity(ies) as provided by § 23 of the German Transformation Act or §§ 125, 23 German Transformation Act.

(6) *Abspaltung*. Im Fall einer Abspaltung von der Emittentin (§ 123 Absatz 2 Umwandlungsgesetz) an oder vor dem letzten Tag, an dem Aktien gemäß § 10(1) geliefert werden, wird der Wandlungspreis gemäß der nachstehenden Formel angepasst:

(6) *Spin Off*. In the event of a spin off from the Issuer (*Abspaltung*, § 123(2) of the German Transformation Act) on or prior to the last day on which Shares are delivered pursuant to § 10(1), the Conversion Price shall be adjusted in accordance with the following formula:

$$E' = E \times \frac{M - F}{M}$$

wobei:

E' = der angepasste Wandlungspreis,

E = der Wandlungspreis am Stichtag (wie in § 12(13) definiert),

M = der Durchschnittliche Marktpreis (wie in § 12(13) definiert), und

F = der Angemessene Marktwert der Anzahl der Spaltungsaktien, die zu erhalten ein Aktionär der Emittentin je Aktie am Ex-Tag berechtigt ist.

Eine Anpassung des Wandlungspreises erfolgt nicht, wenn F = oder < 0.

$$E' = E \times \frac{M - F}{M}$$

where:

E' = the adjusted Conversion Price,

E = the Conversion Price on the Record Date (as defined in § 12(13)),

M = the Average Market Price (as defined in § 12(13)), and

F = the Fair Market Value of the number of Spin off Shares to which a shareholder of the Issuer is entitled per Share as at the Ex Date.

There shall be no adjustment of the Conversion Price if F equals or is < 0.

(7) *Andere Ereignisse*. Bei einer Verschmelzung (§ 2 Umwandlungsgesetz), bei der die Emittentin der übernehmende Rechtsträger ist, bei einer Ausgliederung eines oder mehrerer Vermögenswerte durch die Emittentin (§ 123 Absatz 3 Umwandlungsgesetz) oder bei einem ähnlichen Ereignis vor dem letzten Tag, an dem Aktien gemäß § 10(1) geliefert werden, bleibt der Wandlungspreis je Aktie unverändert.

(7) *Other Events*. In the event of a merger (*Verschmelzung*, § 2 of the German Transformation Act) whereby the Issuer is the acquiring entity (*übernehmender Rechtsträger*), a hive down of one or more assets by the Issuer (*Ausgliederung,* § 123(3) of the German Transformation Act), or a similar event prior to the last day on which Shares are delivered pursuant to § 10(1), the Conversion Price shall remain unchanged.

(8) *Mehrfache Anpassung*. Sofern eine Anpassung des Wandlungspreises nach mehr als einer der Vorschriften der § 12(1) lit. (a), (1) lit. (b), (2), (3), (4), (5) und/oder (6) durchzuführen ist und der Stichtag (wie in § 12(13) definiert) für diese Anpassungen auf denselben Tag fällt, wird, es sei denn die Reihenfolge der Ereignisse, die eine Anpassung auslösen, wurde von der Emittentin anders festgelegt, zuerst eine Anpassung nach den Vorschriften von § 12(1) lit. (b), zweitens nach den Vorschriften des § 12(4), drittens nach den Vorschriften des § 12(1) lit. (a), viertens nach den Vorschriften des § 12(2), fünftens nach den Vorschriften des § 12(3), sechstens nach den Vorschriften des § 12(5) und schließlich nach den Vorschriften des § 12(6) durchgeführt.

(8) *Multiple Adjustment*. If adjustments of the Conversion Price are required under more than one of § 12(1)(a), (1)(b), (2), (3), (4), (5) and/or (6), and the Record Date (as defined in § 12(13)) for such adjustments shall occur on the same date, then, unless the order of the events requiring such adjustments is otherwise specified by the Issuer, such adjustments shall be made by applying, first, the provisions of § 12(1)(b), second, the provisions of § 12(4), third, the provisions of § 12(1)(a), fourth, the provisions of § 12(2), fifth, the provisions of § 12(3), sixth, the provisions of § 12(5), and finally the provisions of § 12(6).

(9) Falls

(a) die Emittentin feststellt oder

(b) die Zahlstelle Erklärungen von Anleihegläubigern erhalten hat, die zusammen Schuldverschreibungen mit einem Gesamtnennbetrag von insgesamt mindestens 10 % des Gesamtnennbetrags der sich zu diesem Zeitpunkt insgesamt im Umlauf befindenden Schuldverschreibungen halten, in denen die Anleihegläubiger feststellen,

dass Ereignisse oder Umstände eingetreten sind, die außerhalb der Vorgaben von § 12(1) bis (7) eine Anpassung wegen Verwässerung notwendig machen (sofern nicht die Ereignisse oder Umstände ausdrücklich von der Anwendung der § 12(1) bis (7) ausgeschlossen wurden), wird die Emittentin auf eigene Kosten und in Abstimmung mit der Berechnungsstelle einen Unabhängigen Sachverständigen um eine umgehende Feststellung ersuchen, welche weitere Anpassung gegebenenfalls den Umständen entsprechend billig und angemessen ist und an welchem Tag die Anpassung wirksam wird. Der Unabhängige Sachverständige wird gegebenenfalls die Anpassung bestimmen, die gemäß dessen Feststellung wirksam wird.

(9) If

(a) the Issuer determines, or

(b) the Paying Agent has received notices from Bondholders holding Bonds in an aggregate principal amount of at least 10 per cent. of the aggregate principal amount of all Bonds then outstanding in which the Bondholders determine

that another adjustment for dilution should be made as a result of one or more events or circumstances not referred to above in § 12(1) to (7) (except for events or circumstances that are specifically excluded from the operation of § 12(1) to (7)), the Issuer will, at its own expense and in consultation with the Calculation Agent, request an Independent Expert to determine as soon as practicable what further adjustment (if any) is fair and reasonable to take account thereof and the date on which such adjustment shall become effective. The Independent Expert will determine such adjustment (if any) which will take effect in accordance with such determination.

(10) *Ausschluss von Anpassungen*.

(a) Keine Anpassungen erfolgen im Hinblick auf die Ausgabe von Aktien, Aktienoptionen und/oder Aktienbeteiligungsprogramme und/oder anderen aktienbasierten Vergütungen und/oder Programmen gleich welcher Art für Mitglieder des Vorstands oder des Aufsichtsrats (oder, im Fall

(10) *Exclusion of Adjustments*.

(a) No adjustments shall be made in relation to the issuance of shares, stock options and/or stock ownership programs and/or other share based payments and/or programs of whatever kind for any members of the management board or supervisory board (or, in the case of affiliates, their

verbundener Unternehmen, deren Gremien bzw. Organen) und/oder Mitarbeiter der Emittentin und/oder mit ihr verbundener Unternehmen oder die Ausgabe von Aktien aus einem bedingten oder genehmigten Kapital für diese Zwecke oder die Ausgabe von für diese oder andere Zwecke erworbenen eigenen Aktien.

corporate bodies or boards) and/or employees of the Issuer and/or any of its affiliates or the issuance of Shares out of conditional or authorized capital for such purposes or the issue of own shares acquired for this or any other purpose.

(b) Keine Anpassungen erfolgen ferner im Hinblick auf die in der außerordentlichen Hauptversammlung der Emittentin am 27. November 2020 beschlossenen Kapitalherabsetzungen.

(b) Furthermore, no adjustments shall be made in relation to the capital decreases as resolved by the extraordinary shareholders' meeting of the Issuer on 27 November 2020.

(c) Keine Anpassungen erfolgen ferner im Zusammenhang mit der Ausgabe von Aktien oder anderer Wertpapiere, für die das Bezugsrecht der Aktionäre mittelbar (bedingtes Kapital) oder unmittelbar ausgeschlossen ist.

(c) No adjustments shall furthermore be made in relation to the issue of shares or other securities for which the subscription right of shareholders has been indirectly (conditional capital) or directly excluded.

(d) Anpassungen gemäß diesem § 12 erfolgen hinsichtlich gewandelter Schuldverschreibungen nicht mehr, wenn die nach Maßgabe von § 10(1) zu liefernden Aktien von der oder für die Emittentin an die Clearstream Banking AG, Eschborn, geliefert worden sind.

(d) Adjustments pursuant to this § 12 shall be excluded in relation to Bonds converted once the Shares to be delivered pursuant to § 10(1) have been delivered by or on behalf of the Issuer to Clearstream Banking AG, Eschborn.

(11) *Wirksamkeit von Anpassungen*. Anpassungen gemäß den vorstehenden Bestimmungen werden am Ex Tag (wie in § 12(13) definiert) oder, sofern später liegend, an dem Tag, der dem Tag, an dem der Angemessene Marktwert des relevanten Wertpapiers, Rechts oder anderen Vermögensgegenstands festgestellt werden kann, unmittelbar folgt, wirksam, oder, im Falle von Anpassungen nach § 12(6), am siebten Geschäftstag, nachdem die Spaltungsaktien erstmals gehandelt werden, oder, im Falle von Anpassungen gemäß § 12(10) lit. (a), an dem Tag, an dem eine solche Anpassung nach Festlegung der Berechnungsstelle wirksam wird. Anpassungen nach Maßgabe dieses § 12 werden nicht vorgenommen, sofern der Ex Tag, oder im Falle von § 12(5) und (6), der Tag, an dem die Verschmelzung oder sonstige Reorganisation wirksam wird, oder, im Falle von nicht ausgeübten Wandlungsrechten, nach dem letzten Tag des betreffenden Wandlungszeitraums liegt.

(11) *Effectiveness of Adjustments*. Adjustments in accordance with the foregoing provisions shall become effective as of the Ex Date (as defined in § 12(13)), or, if later, on the day immediately following the day on which the Fair Market Value of the relevant security, right or other asset can be determined, or, in the case of adjustments pursuant to § 12(6), the seventh Business Day after the Spin off Shares are traded for the first time or, in the case of adjustments pursuant to § 12(10)(a), the date on which such adjustment takes effect as determined by the Calculation Agent. Adjustments pursuant to this § 12 will not be made if the Ex Date or, in the case of adjustments pursuant to § 12(5) and (6), the merger or other reorganization becomes effective or, in the case of Conversion Rights not exercised, later than the last day of the relevant Conversion Period.

(12) *Berechnung von Anpassungen*.

(a) Anpassungen nach den vorstehenden Absätzen werden durch die Berechnungsstelle (wie in § 14(1) definiert) berechnet und sind (sofern

(12) *Calculations of Adjustments*.

(a) Adjustments in accordance with the foregoing clauses shall be calculated by the Calculation Agent (as defined in § 14(1)) and shall be (in the

nicht ein offensichtlicher Fehler vorliegt) für alle Beteiligten bindend. Der Wandlungspreis wird nach deutschen kaufmännischen Grundsätzen auf 4 Dezimalstellen gerundet, wobei ab € 0,00005 aufgerundet wird.	absence of manifest error) binding on all parties concerned. The Conversion Price shall be rounded to 4 decimal points in accordance with German business practice, with € 0.00005 being rounded upwards.
(b) Jedwede Anpassung des Wandlungspreises gemäß diesem § 12 darf nicht zu einem Wandlungspreis führen, der niedriger ist als der auf die einzelne Aktie entfallende anteilige Betrag des Grundkapitals der Emittentin. Gleichwohl wird auf jeden Umstand hin, der ohne diesen § 12(12)(b) eine unter dem auf die einzelne Aktie entfallenden anteiligen Betrag des Grundkapitals der Emittentin liegende Anpassung des Wandlungspreises zur Folge hätte, die Berechnung aller nachfolgenden Anpassungen auf der Basis des Wandlungspreises vorgenommen, der bei Nichtanwendbarkeit dieses § 12(12)(b) berechnet worden wäre. Liegt das Ergebnis solcher Berechnungen unter dem auf die einzelne Aktie entfallenden anteiligen Betrag des Grundkapitals der Emittentin, so entspricht der Wandlungspreis dem auf die einzelne Aktie entfallenden anteiligen Betrag des Grundkapitals der Emittentin. Soweit eine Anpassung des Wandlungspreises aufgrund dieses § 12(12)(b) nicht durchgeführt werden darf, ist die Emittentin nicht dazu verpflichtet, den Anleihegläubigern eine Geldzahlung oder anderen Ausgleich zu leisten.	(b) Any adjustment of the Conversion Price pursuant to this § 12 may not result in a Conversion Price that is less than the portion of the share capital allotted to each Share in the Issuer's share capital. Without prejudice to the foregoing, upon any event which, but for this § 12(12)(b), would result in an adjustment to the Conversion Price to an amount which is less than the interest in the share capital of the Issuer represented by each share, the calculation of any subsequent adjustments will be made on the amount of the Conversion Price which would have resulted had this § 12(12)(b) not applied. If the result of such adjustments is below the interest in the share capital of the Issuer represented by each share, the Conversion Price will be equal to the interest in the share capital of the Issuer represented by each share. To the extent that an adjustment to the Conversion Price must not be made as a result of this § 12(12)(b), the Issuer will not be obliged to compensate the Bondholders by a cash payment or in any other way.
(13) *Definitionen*. In diesen Anleihebedingungen bedeutet:	(13) *Definitions.* In these Terms and Conditions:
"Angemessener Marktwert" eines Wertpapiers (einschließlich der Aktie und etwaiger Spaltungsaktien), Rechts oder sonstigen Vermögensgegenstands an einem Tag:	"Fair Market Value" of a security (including the Share and any Spin off Share), right or other asset, on any date, means,
(a) falls die Emittentin an ihre Aktionäre eine Bardividende (mit Ausnahme einer Scrip Dividende (wie in § 12(13) lit. (b) definiert)) zahlt oder einen sonstigen Geldbetrag ausschüttet, den Betrag der Bardividende je Aktie bzw. den Betrag der sonstigen Ausschüttung in Geld je Aktie vor dem Abzug von Quellensteuer an diesem Datum, wie von der Berechnungsstelle festgestellt;	(a) if the Issuer pays to its shareholders a Cash Dividend (other than a Scrip Dividend (as defined in § 12(13)(b))) or distributes any other cash amount, the amount of such Cash Dividend per Share or the amount of such other distribution in cash per Share prior to deduction of any withholding tax on such date, as determined by the Calculation Agent;
(b) falls die Emittentin ihren Aktionären ein Wahlrecht einräumt, eine Bardividende in Aktien anstatt in Geld ausgeschüttet	(b) if the Issuer grants to the shareholders an option to receive a Cash Dividend in the form of Shares in lieu of the cash

	zu erhalten ("Scrip Dividende"), den höheren der folgenden Beträge: (i) der Geldbetrag der Bardividende je Aktie, und(ii) der Wert der von der Emittentin alternativ zu diesem Geldbetrag angebotenen Aktien oder sonstigen Wertpapieren, Rechten oder sonstigen Vermögensgegenständen.	amount ("Scrip Dividend"), the greater of (i) the cash amount of the Cash Dividend per Share, and (ii) the value of the shares or other securities, rights or assets offered by the Issuer as an alternative to such cash amount.
	Für die Zwecke von (ii) entspricht der Wert:	For purposes of (ii), the value will be equal to,
	(A) im Falle von Aktien, (1) dem gemäß der in Absatz (c) enthaltenen Formel berechneten Betrag, wie jeweils von der Berechnungsstelle festgestellt, bzw. (2) wenn der Scrip-Feststellungstermin auf den oder nach dem Ex-Tag der Scrip-Dividende fällt, dem Produkt aus der Anzahl der je existierender Aktie aus-geschütteten Aktien und dem rechnerischen Durchschnitt der täglichen XETRA-Notierungen an den letzten drei Handelstagen, die an dem Handelstag (einschließlich) vor dem Scrip-Feststellungstermin enden (wobei falls die Aktie an einem oder mehreren Handelstagen "cum" der betreffenden Scrip Dividende notiert, dann wird die tägliche XETRA-Notierung an jedem der betreffenden Handelstage um einen Betrag vermindert, der dem angemessenen Marktwert der Scrip-Dividende an deren Ex-Tag entspricht), und	(A) in the case of Shares, (1) the amount calculated pursuant to the formula in limb (c), in each case as determined by the Calculation Agent, or (2) if the Scrip Determination Date falls on or after the Ex-Date of the Scrip Dividend, the product of the number of Shares distributed per existing Share and the arithmetic average of the daily Share Prices, on the three Trading Days ending on and including the Trading Day prior to the Scrip Determination Date (provided that if the Share is quoted "cum" such Scrip Dividend on one or more of such Trading Days, the relevant daily Share Price on each such Trading Day shall be reduced by an amount equal to the fair market value of such Scrip Dividend on the Ex-Date of such Scrip Dividend), and
	(B) im Falle von sonstigen Wert-papieren, Rechten oder sonstigen Vermögens-gegenständen dem gemäß dem nachstehenden Absatz (d) bzw. dem nachstehenden Absatz (e) festgestellten angemessenen Marktwert der sonstigen Wertpapiere, Rechte oder sonstigen Vermögens-gegenstände an dem späteren der folgenden Tage: (x) dem Ex-Tag der Scrip Dividende oder (y) dem Scrip-Feststellungs-termin, wobei die Berechnungs-stelle alle Feststellungen trifft;	(B) in the case of other securities, rights or assets, the fair market value of such other securities, rights or assets, as determined pursuant to clause (d) or, as the case may be, clause (e) below, on the later of (y) the Ex-Date of the Scrip Dividend and (x) the Scrip Determination Date, all as determined by the Calculation Agent;
(c)	im Falle von Aktien (für Zwecke von § 12(4) Ziff. (i)), den von der	(c) in the case of Shares (for the purposes of § 12(4)(i)), the amount calculated by

	Berechnungsstelle gemäß der folgenden Formel berechneten Betrag: $F = \frac{M \times N}{(I + N)}$ Dabei gilt Folgendes: F = der Angemessene Marktwert, M = der Durchschnittliche Marktpreis, und N = die Anzahl der je existierender Aktie ausgeschütteten Aktien; und		the Calculation Agent in accordance with the following formula: $F = \frac{M \times N}{(I + N)}$ where: F = the Fair Market Value, M = the Average Market Price, and N = the number of Shares distributed per existing Share; and
(d)	im Falle sonstiger Wertpapiere (einschließlich Spaltungsaktien), Rechte oder sonstiger Vermögensgegenstände, die an einer Wertpapierbörse oder einem Wertpapiermarkt mit adäquater Liquidität (wie durch die Berechnungsstelle festgelegt) öffentlich gehandelt werden, die Anzahl der je Aktie ausgeschütteten sonstigen Wertpapiere, Rechte oder sonstigen Vermögensgegenstände multipliziert mit dem einfachen arithmetischen Durchschnitt der täglichen Wertpapier-Kurse (wie in § 12(13) definiert) für das betreffende Wertpapier, das betreffende Recht oder den betreffenden sonstigen Vermögensgegenstand an den 5 Handelstagen (oder einem gegebenenfalls kürzeren Zeitraum, innerhalb dessen die betreffenden Wertpapiere (einschließlich Spaltungsaktien), Rechte oder sonstigen Vermögensgegenstände öffentlich gehandelt werden), die an dem betreffenden Tag (frühestens jedoch an dem ersten Handelstag, an dem die betreffenden Wertpapiere (einschließlich Spaltungsaktien), Rechte oder sonstigen Vermögensgegenstände öffentlich gehandelt werden) beginnen; oder	(d)	in the case of any other security (including Spin off Shares), right or other asset which is publicly traded on a stock exchange or securities market of adequate liquidity (as determined by the Calculation Agent), the number of such securities, rights or other assets distributed per Share multiplied by the simple arithmetic average of the daily Security Prices (as defined in § 12(13)) of such security, right or other asset over the 5 Trading Days (or such shorter period as such securities (including Spin off Shares), rights or other assets are publicly traded) beginning on such date (however at the earliest the first Trading Day such securities (including Spin off Shares), rights or other assets are publicly traded), as calculated by the Calculation Agent; or
(e)	im Falle sonstiger Wertpapiere (einschließlich Spaltungsaktien), Rechte oder sonstiger Vermögensgegenstände, die nicht wie zuvor beschrieben an einer Wertpapierbörse oder einem Wertpapiermarkt mit adäquater Liquidität öffentlich gehandelt werden, den von einem Unabhängigen Sachverständigen festgelegten angemessenen Marktwert der je Aktie ausgeschütteten Wertpapiere, Rechte	(e)	in the case of any other security (including Spin off Shares), right or other asset which is not publicly traded on a stock exchange or securities market of adequate liquidity (as aforesaid), the fair market value of such securities, rights or other assets distributed per Share as determined by an Independent Expert,

oder sonstigen Vermögensgegenstände,	
jeweils (sofern erforderlich) umgerechnet in Euro mit dem an dem jeweiligen Tag geltenden Maßgeblichen Wechselkurs.	in each case converted (if necessary) into Euro at the Relevant FX Rate in effect on such date.
Dabei bezeichnet:	Where:
"Bardividende" ist der Betrag einer Bardividende, die auf die Aktien der Emittentin vor Abzug von Quellensteuer gezahlt wird und schließt Scrip Dividenden ein.	"Cash Dividend" means any cash dividend paid on the Shares of the Issuer prior to deduction of any withholding tax and includes Scrip Dividends.
Falls die Emittentin während eines Geschäftsjahrs eine Bardividende zahlt, die nicht in Bezug auf ein bestimmtes Geschäftsjahr gezahlt wird, gilt diese Bardividende als in Bezug auf das vorangegangene Geschäftsjahr gezahlt.	In the event that during any Financial Year the Issuer pays any Cash Dividend which is not paid in respect of any particular Financial Year, such Cash Dividend shall be deemed to be paid in respect of the Financial Year previously ended.
"Durchschnittlicher Marktpreis" ist der arithmetische Durchschnitt der XETRA-Notierungen (wie unten definiert) für die 3 aufeinanderfolgenden Handelstage, die dem relevanten Stichtag (wie unten definiert) vorangehen, wie von der Berechnungsstelle berechnet.	"Average Market Price" means the arithmetic average of the XETRA-Quotations (as defined below) on the 3 consecutive Trading Days prior to the relevant Record Date (as defined below), as calculated by the Calculation Agent.
"Ex Tag" ist jeweils der erste Handelstag, an dem die Aktie "ex Dividende" bzw. "ex Bezugsrecht" oder ohne sonstige Rechte, auf die vom Kurs für die jeweils in Bezug genommene Ausschüttung und/oder Bardividende von Zeit zu Zeit ein Abschlag in XETRA gemacht wird, gehandelt wird.	"Ex Date" means the first Trading Day on which the Shares are traded "ex dividend" or "ex subscription right" or ex any other right which, in view of the respective distribution and/or Cash Dividend, are deducted from time to time from the quoted price in XETRA.
"FWB" bezeichnet die Frankfurter Wertpapierbörse.	"FSE" means the Frankfurt Stock Exchange.
"Geschäftsjahr" ist das satzungsmäßige Geschäftsjahr der Emittentin.	"Financial Year" means the financial year as set out in the articles of association of the Issuer.
"Maßgebliche Bildschirmseite" die maßgebliche Bildschirmseite in dem Bloomberg Informationssystem oder in einem anderen Informationssystem, welches die maßgeblichen Informationen anzeigt.	"Relevant Screen Page" means the relevant screen page on the Bloomberg information system or such other information system that displays the relevant information.
"Maßgeblicher Wechselkurs" für die Umrechnung von einer Währung in eine andere an einem bestimmten Tag den EZB-Referenz-Wechselkurs für dieses Währungspaar an diesem Tag, wie er auf der Maßgeblichen Bildschirmseite erscheint oder von dieser hergeleitet wird.	"Relevant FX Rate" means on any day, and, in respect of the conversion of any currency into Euro, the European Central Bank reference rate for such pair of currencies on that day as appearing on or derived from the from the Relevant Screen Page.
Falls der Maßgebliche Wechselkurs nicht gemäß den vorstehenden Bestimmungen ermittelt werden kann, ist der Maßgebliche Wechselkurs der in entsprechender Anwendung der vorstehenden Regelungen bestimmte Wechselkurs auf der Maßgeblichen Bildschirmseite an dem letzten Tag vor dem	If the Relevant FX Rate cannot be determined in accordance with the foregoing provisions, the Relevant FX Rate shall be exchange rate determined in accordance with the foregoing provisions mutatis mutandis but with respect to the last day preceding such day on which such rate can

betreffenden Tag, an dem der Wechselkurs ermittelt werden kann. Wenn der Maßgebliche Wechselkurs nicht auf diese Weise unter Bezugnahme auf die Maßgebliche Bildschirmseite ermittelt werden kann, dann wird ein Unabhängiger Sachverständiger den Maßgeblichen Wechselkurs auf der Basis solcher Notierungen oder anderer Informationen bestimmen, die dieser Unabhängige Sachverständige für maßgeblich hält; diese Bestimmung ist abschließend.	be determined. If the Relevant FX Rate cannot be so determined by reference to the Relevant Screen Page, an Independent Expert will determine the Relevant FX Rate on the basis of such quotations or other information as such Independent Expert considers appropriate; any such determination will be conclusive.
"Relevanter Markt" bezeichnet das XETRA-System der FWB oder eine andere Wertpapierbörse oder ein anderer Wertpapiermarkt, an der bzw. dem das betreffende Wertpapier, Recht oder der sonstige Vermögensgegenstand im betreffenden Zeitpunkt hauptsächlich gehandelt wird.	"Relevant Market" means the XETRA system of the FSE or such other stock exchange or securities market on which such security, right or other asset is mainly traded at the relevant time.
"Scrip-Feststellungstermin" für eine Scrip Dividende bezeichnet den späteren der folgenden Tage: (i) den letzten Tag, an dem ein Aktionär der Emittentin das in der Definition des Begriffs "Scrip-Dividende" beschriebene Wahlrecht ausüben kann und (ii) den Tag an dem die Anzahl der je existierender Aktie ausgeschütteten Aktien oder anderen Wertpapiere, Rechte oder sonstigen Vermögensgegenstände festgestellt wird.	"Scrip Determination Date" means, in respect of a Scrip Dividend, the later of the (i) the last date on which a shareholder of the Issuer can make such election as is referred to in the definition of "Scrip Dividend" and (ii) the date on which the number of Shares or other securities, rights or assets granted per existing Share is determined.
"Spaltungsaktien" bezeichnet die Aktien an dem neuen Rechtsträger bzw. den übernehmenden Rechtsträgern, die ein Aktionär der Emittentin im Zuge der Abspaltung (§ 123 Abs. 2 Umwandlungsgesetz) zu erhalten berechtigt ist.	"Spin off Shares" means the shares in the new entity (entities) which a shareholder of the Issuer is entitled to receive in the course of the spin off (*Abspaltung*, § 123(2) German Transformation Act).
"Stichtag" ist, je nachdem was zeitlich früher gelegen ist, entweder (i) der relevante Zeitpunkt für die Bestimmung der Aktionäre, die Rechte, Bezugsrechte, Optionen oder Wandlungsrechte oder Ausschüttungen oder Spaltungsaktien erhalten, oder (ii) der Handelstag, der dem Ex Tag unmittelbar vorangeht.	"Record Date" means the time and date being the earlier of (i) the relevant time of the determination of shareholders entitled to receive rights, subscription rights, option or conversion rights, or Distributions or Spin off Shares, and (ii) the Trading Day which immediately precedes the Ex Date.
"Unabhängiger Sachverständiger" bezeichnet eine unabhängige international anerkannte Bank oder einen unabhängigen Finanzberater mit einschlägiger Expertise, die bzw. der von der Emittentin auf eigene Kosten bestellt wird, wobei die anfängliche Berechnungsstelle der Unabhängige Sachverständige sein kann.	"Independent Expert" means an independent bank of international standing or an independent financial adviser with relevant expertise, which may be the initial Calculation Agent, appointed by the Issuer at its own expense.
"Verkaufsoptionswert" ist (berechnet je Aktie):	"Put Option Value" means (calculated on a per share basis):

(a) der von der EUREX Deutschland und ihrer etwaigen Rechts- oder Funktionsnachfolgerin ("EUREX") auf Basis der Marktlage am letzten Handelstag vor Beginn des Verkaufsoptionshandels ermittelte Wert der Verkaufsoption;	(a) the value of the put option, as determined by EUREX Deutschland and any legal or functional successor thereof ("EUREX") on the basis of the market situation prevailing on the Trading Day before the put option commences to be traded;
(b) falls ein solcher Wert (weil Optionen auf die Aktien an der EUREX nicht gehandelt werden oder aus sonstigen Gründen) von der EUREX nicht bekannt gegeben wird, der Schlusskurs des Rechts zum Verkauf von Aktien am Ex-Tag; oder	(b) if such value is not published by EUREX (because options on the shares are not traded on EUREX or for any other reason), the closing price of the right to sell shares on the Ex Date; or
(c) falls ein solcher Wert nicht feststellbar ist, der Wert der Verkaufsoption, der von einem Unabhängigen Sachverständigen unter Berücksichtigung der Marktlage während des Zeitraums, in dem die maßgeblichen Verkaufsoptionen gehandelt werden, bestimmt wird.	(c) if such price is not available, the value of the put option which will be determined by an Independent Expert taking into account the prevailing market conditions during the period in which the relevant put options are traded.
"Wertpapier-Kurs" an jedem Handelstag bezeichnet	"Security Price" means on any Trading Day
(i) den volumengewichteten durchschnittlichen Kurs des betreffenden Wertpapiers, Rechts oder sonstigen Vermögensgegenstands an dem Relevanten Markt an dem jeweiligen Handelstag, wie er	(i) the volume-weighted average price of the security, right or other asset on the Relevant Market on the relevant Trading Day
(A) auf der Bloomberg Bildschirmseite HP (setting weighted average) in dem Bloomberg Informationssystem (oder zukünftig auf einer Nachfolgerin dieser Seite bzw. dieser Einstellung) angezeigt wird, bzw.	(A) appearing on the Bloomberg screen page HP (setting "Weighted Average Line") on the Bloomberg information system (or any future successor screen page or setting) or,
(B) wenn kein volumengewichteter durchschnittlicher Kurs des betreffenden Wertpapiers, Rechts oder sonstigen Vermögensgegenstands in dem Bloomberg Informationssystem erhältlich ist, den volumengewichteten durchschnittlichen Kurs des betreffenden Wertpapiers, Rechts oder sonstigen Vermögensgegenstands an dem Relevanten Markt an dem jeweiligen Handelstag, wie er von dem Relevanten Markt (oder einer anderen, von einem Unabhängigen Sachverständigen festgelegten	(B) if no volume-weighted average price of the security, right or other asset is available as aforesaid from the Bloomberg information system, the volume-weighted average price of the security, right or other asset on the Relevant Market on the relevant Trading Day as derived from the Relevant Market (or other appropriate source as determined by an Independent Expert), or

adäquaten Quelle) hergeleitet wird, bzw.	
(ii) wenn kein solcher volumengewichteter durchschnittlicher Kurs des betreffenden Wertpapiers, Rechts oder sonstigen Vermögensgegenstands erhältlich ist, der offizielle Schlusskurs des betreffenden Wertpapiers, Rechts oder sonstigen Vermögensgegenstands an dem Relevanten Markt an dem betreffenden Handelstag, bzw.	(ii) if no such volume-weighted average price of the security, right or other asset is available as aforesaid, the official closing price of the security, right or other asset as reported on the Relevant Market, or
(iii) für den Fall, dass kein offizieller Schlusskurs des betreffenden Wertpapiers, Rechts oder sonstigen Vermögensgegenstands an dem Relevanten Markt an dem betreffenden Handelstag veröffentlicht wird, der letzte veröffentlichte Kurs des betreffenden Wertpapiers, Rechts oder sonstigen Vermögensgegenstands an dem Relevanten Markt an dem jeweiligen Handelstag, bzw.	(iii) if no such official closing price of the security, right or other asset is reported on the Relevant Market, the last reported official quotation of the security, right or other asset on the Relevant Market, on the relevant Trading Day, or
(iv) wenn keine solchen Notierungen oder Preise erhältlich sind, wird ein Unabhängiger Sachverständiger den Wertpapier-Kurs auf der Basis solcher Notierungen oder anderer Informationen festlegen, die dieser Unabhängige Sachverständige für maßgeblich hält; diese Festlegung ist abschließend. Falls die Feststellung des Wertpapier-Kurses aufgegeben wird, schließt eine Bezugnahme auf den Wertpapier-Kurs in diesen Emissionsbedingungen die Bezugnahme auf einen Kurs, der den Wertpapier-Kurs (x) kraft Gesetzes oder (y) aufgrund einer allgemein akzeptierten Marktpraxis ersetzt, ein.	(iv) if no such quotations or prices are available, an Independent Expert will determine the Security Price on the basis of such quotations or other information as such Independent Expert considers appropriate; any such determination will be conclusive. Any reference in these Terms and Conditions to the Security Price will include, if the determination of the Security Price is discontinued, a reference to a quotation which replaces the Security Price (x) by operation of law or (y) on the basis of generally accepted market practice.
"XETRA" bezeichnet das XETRA-Handelssystem der Deutsche Börse AG einschließlich deren Rechtsnachfolger.	"XETRA" means the XETRA trading system of Deutsche Börse AG including any successor thereto.
"XETRA-Notierung" bezeichnet an jedem Handelstag	"XETRA-Quotation" means on any Trading Day
(i) den volumengewichteten durchschnittlichen Kurs für die Aktie in XETRA an dem jeweiligen Handelstag, wie er auf der Bloomberg Bildschirmseite BNR GY Equity HP (Einstellung "Weighted Average Line") in dem Bloomberg Informationssystem (oder zukünftig auf einer Nachfolgerin dieser Seite bzw. dieser Einstellung) angezeigt wird, bzw.	(i) the volume-weighted average price of the Share on XETRA on the relevant Trading Day appearing on the Bloomberg screen page BNR GY Equity HP (setting "Weighted Average Line") on the Bloomberg information system (or any future successor screen page or setting) or

(ii) falls kein volumengewichteter durchschnittlicher Kurs von dem Bloomberg Informationssystem erhältlich ist, den volumengewichteten durchschnittlichen Kurs für die Aktie in XETRA an dem jeweiligen Handelstag, wie er von XETRA (oder einer anderen, von einem Unabhängigen Sachverständigen festgelegten adäquaten Quelle) hergeleitet wird, bzw.	(ii) if no volume-weighted average price of the Share is available as aforesaid from the Bloomberg information system, the volume-weighted average price of the Share on XETRA on the relevant Trading Day as derived from XETRA (or other appropriate source as determined by an Independent Expert), or
(iii) wenn kein solcher volumengewichteter durchschnittlicher Kurs für die Aktie erhältlich ist, den in XETRA festgestellten Börsenschlusskurs bzw.	(iii) if no volume-weighted average price of the Share is available as aforesaid, the official closing price of the Share as reported on XETRA or
(iv) falls kein Börsenschlusskurs in XETRA festgestellt wird, den letzten veröffentlichten, in XETRA festgestellten Börsenkurs an dem jeweiligen Handelstag.	(iv) if no such official closing price of the Share is reported on XETRA, the last reported official quotation of the Share on XETRA, on the relevant Trading Day.
Falls die Aktie nicht in XETRA gehandelt wird, sind die entsprechenden Kurse oder Preise an der FWB maßgeblich.	If the Share is not quoted on XETRA, the respective quotations or prices of the Share on the FSE are decisive.
(14) *Bekanntmachung von Anpassungen*. Die Emittentin wird eine Anpassung des Wandlungspreises und/oder jede andere Anpassung der Bedingungen des Wandlungsrechts in Übereinstimmung mit § 16 bekannt machen.	(14) *Notices of Adjustments*. The Issuer shall give notice of an adjustment of the Conversion Price and/or any other adjustment of the terms of the Conversion Right in accordance with § 16.
(15) *Beschränkung von Anpassungen*. Soweit eine Anpassung des Wandlungspreises gemäß dieses § 12 zusammen mit weiteren Anpassungen des Wandlungspreises gemäß diesen Anleihebedingungen dazu führen würde, dass die Emittentin, (i) unter der Annahme der Wandlung aller ausstehenden Schuldverschreibungen, Aktien mit einem Nennbetrag, der denjenigen Betrag, der aus bedingtem Kapital oder zur Verfügung stehenden eigenen Aktien rechtlich zulässig geliefert werden kann, übersteigt, oder (ii) zusätzliche Aktien liefern müsste, zu deren Lieferung sie nicht befugt ist, findet § 10(4) entsprechende Anwendung.	(15) *Restrictions for Adjustments*. To the extent that any adjustment of the Conversion Price pursuant to this § 12, together with any other adjustments of the Conversion Price pursuant to these Terms and, would require the Issuer, (i) assuming conversion of all outstanding Bonds, to deliver Shares with a notional nominal amount in excess of the available and legally permissibly deliverable conditional capital or available treasury shares, or (ii) to deliver additional shares without being duly authorized to do so, § 10(4) shall apply *mutatis mutandis*.
(16) Bei der Berechnung oder Festlegung einer XETRA-Notierung, eines Wertpapier-Kurses, eines Angemessenen Marktwerts, eines Durchschnittlichen Marktpreises oder der Feststellung von "RD" erfolgen etwaige Anpassungen durch die Berechnungsstelle (vorausgesetzt, die Berechnungsstelle stellt in eigenem Ermessen fest, dass sie in der Lage ist, in ihrer Eigenschaft als Berechnungsstelle eine solche Anpassung vorzunehmen), wie diese oder wie ein Unabhängiger Sachverständiger es für angemessen hält, um	(16) In making any calculation or determination of a XETRA-Quotation, a Security Price, a Fair Market Value, an Average Market Price or "RD", adjustments (if any) shall be made as the Calculation Agent (provided that such Calculation Agent determines, in its sole discretion, that it is capable, acting in such Calculation Agent capacity, of performing such adjustment) or as an Independent Expert considers appropriate to reflect any issue of Shares as a result of a share capital increase from the capital reserve or from

einer Ausgabe von Aktien im Zuge von Kapitalerhöhungen aus Gesellschaftsmitteln (§ 12(1) lit. (a)), einem Aktiensplit, einem umgekehrten Aktiensplit oder einer Zusammenlegung (§ 12(1) lit. (b)), einer Kapitalerhöhung gegen Einlagen mit Bezugsrecht (§ 12(2)), einer Bezugsrechtsemission bezüglich sonstiger Wertpapiere (§ 12(3)), oder einem ähnlichen Ereignis Rechnung zu tragen.

retained earnings (§ 12(1)(a)), any share split/reverse share split or combining of Shares (§ 12(1)(b)), any capital increase against contributions with subscription rights (§ 12(2)), any issue of other securities with subscription rights (§ 12(3)), or any similar event.

§ 13

KONTROLLWECHSEL

Das Wandlungsrecht eines Anleihegläubigers wird durch ein Übernahmeangebot, Pflichtangebot und/oder durch den Eintritt eines Kontrollwechsels (wie auch immer definiert) nicht berührt. Das Vorliegen eines Übernahmeangebots, Pflichtangebots und/oder eines Kontrollwechsels führt nicht zu einer Anpassung des Wandlungspreises.

§ 13

CHANGE OF CONTROL

The Conversion Right of a Bondholder remains unaffected by a take-over bid, a mandatory take-over bid and/or the occurrence of a change of control (however defined). The occurrence of a take-over bid, a mandatory take-over bid and/or a change of control does not lead to an adjustment of the Conversion Price.

§ 14

ZAHLSTELLE, WANDLUNGSSTELLE; BERECHNUNGSSTELLE

(1) *Wandlungsstelle; Berechnungsstelle*. Die Emittentin hat Bankhaus Gebr. Martin AG zur Wandlungsstelle (die "Wandlungsstelle") und zur Zahlstelle (die "Zahlstelle") bestellt. Die Emittentin ist als Berechnungsstelle tätig (die "Berechnungsstelle" und gemeinsam mit der Wandlungsstelle und der Zahlstelle die "Verwaltungsstellen").

Die Geschäftsräume der Wandlungsstelle und der Zahlstelle befinden sich unter der folgenden Adresse:

Bankhaus Gebr. Martin AG
Schlossplatz 7
73033 Göppingen
Deutschland

Die Geschäftsräume der Berechnungsstelle befinden sich unter der folgenden Adresse:

Epigenomics AG
Geneststr. 5
10829 Berlin
Deutschland

Adressänderungen werden gemäß § 16 bekannt gemacht.

In keinem Fall dürfen sich die Geschäftsräume einer Verwaltungsstelle innerhalb der Vereinigten Staaten oder ihrer Besitzungen befinden.

(2) *Ersetzung*. Die Emittentin wird dafür sorgen, dass stets eine Wandlungsstelle, eine Berechnungsstelle und eine Zahlstelle

§ 14

PAYING AGENT, CONVERSION AGENT; CALCULATION AGENT

(1) *Conversion Agent; Calculation Agent*. The Issuer has appointed Bankhaus Gebr. Martin AG to act as conversion agent (the "Conversion Agent") and as paying agent (the "Paying Agent"). The Issuer acts as calculation agent (the "Calculation Agent", and together with the Conversion Agent and the Paying Agent, the "Agents).

The address of the specified office of the Conversion Agent and the Paying Agent is:

Bankhaus Gebr. Martin AG
Schlossplatz 7
73033 Göppingen
Germany

The address of the specified office of the Calculation Agent is:

Epigenomics AG
Geneststr. 5
10829 Berlin
Germany

Changes of address shall be published in accordance with § 16.

In no event will the specified office of any Agent be within the United States or its possessions.

(2) *Substitution*. The Issuer will procure that there will at all times be a Conversion Agent, a Calculation Agent and a Paying Agent. The

	vorhanden sind. Die Emittentin ist berechtigt, andere anerkannte Banken als Wandlungsstelle bzw. Zahlstelle bzw. eine anerkannte Bank oder einen Finanzberater mit einschlägiger Expertise als Berechnungsstelle zu bestellen. Die Emittentin ist weiterhin berechtigt, die Bestellung einer Verwaltungsstelle zu beenden. Im Fall einer solchen Beendigung oder falls die bestellte Verwaltungsstelle nicht mehr als Verwaltungsstelle in der jeweiligen Funktion tätig werden kann oder will, bestellt die Emittentin eine andere anerkannte Bank als Wandlungsstelle bzw. eine anerkannte Bank oder einen Finanzberater mit einschlägiger Expertise als Berechnungsstelle. Eine solche Bestellung oder Beendigung der Bestellung ist unverzüglich gemäß § 16 oder, falls dies nicht möglich sein sollte, durch eine öffentliche Bekanntmachung in sonstiger geeigneter Weise bekannt zu machen.		Issuer is entitled to appoint other banks of standing as Conversion Agent or Paying Agent, respectively, or, in the case of the Calculation Agent only, a bank of standing or a financial adviser with relevant expertise. Furthermore, the Issuer is entitled to terminate the appointment of any Agent. In the event of such termination or such Agent being unable or unwilling to continue to act as Agent in the relevant capacity, the Issuer will appoint another bank of standing as Conversion Agent or, in the case of the Calculation Agent only, a bank of standing or a financial adviser with relevant expertise. Such appointment or termination will be published without undue delay in accordance with § 16, or, should this not be possible, be published in another appropriate manner.
(3)	*Verwaltungsstellen Erfüllungsgehilfen der Emittentin*. Soweit in diesen Anleihebedingungen nicht ausdrücklich etwas anderes bestimmt ist, handeln die Verwaltungsstellen in ihrer jeweiligen Eigenschaft ausschließlich als Erfüllungsgehilfen der Emittentin und stehen in dieser Eigenschaft nicht in einem Auftrags- oder Treuhand- oder sonstigem Vertragsverhältnis zu den Anleihegläubigern. Alle Bestätigungen, Mitteilungen, Gutachten, Bestimmungen, Berechnungen, Sätze und Entscheidungen, die die Wandlungsstelle und/oder die Zahlstelle vornehmen, äußern oder einholen, sind (soweit kein offenkundiger Fehler vorliegt) für die Emittentin, die Anleihegläubiger und die anderen Verwaltungsstellen verbindlich.	(3)	*Agents of the Issuer*. Unless otherwise expressly specified in these Terms and Conditions, each Agent in such capacity is acting exclusively as agent of the Issuer and in such capacity does not have any relationship of agency or trust or other contract with the Bondholders. All certificates, communications, opinions, determinations, calculations, quotations and decisions given, expressed, made or obtained by the Conversion Agent and/or the Paying Agent shall (in the absence of manifest error) be binding on the Issuer, the Bondholders and the other Agents.
	Jede Verwaltungsstelle ist von den Beschränkungen des § 181 Bürgerliches Gesetzbuch ("BGB") und vergleichbaren Beschränkungen nach einem ggf. anwendbaren ausländischen Recht befreit.		Each Agent is exempt from the restrictions of § 181 of the German Civil Code (*Bürgerliches Gesetzbuch* – "BGB") and similar restrictions that may be applicable under foreign law.
(4)	*Berechnungsstelle.* Die Berechnungsstelle wird diejenigen Berechnungen, Anpassungen oder Feststellungen vornehmen, die nach diesen Anleihebedingungen von ihr ausdrücklich vorzunehmen sind. Alle solche Berechnungen, Anpassungen oder Festlegungen sind (soweit kein offenkundiger Fehler vorliegt) für die Emittentin, die Anleihegläubiger und die anderen Verwaltungsstellen verbindlich. Die Berechnungsstelle kann, soweit vernünftigerweise erforderlich, auf Kosten der Emittentin, in Bezug auf bestimmte Angelegenheiten (einschließlich rechtliche	(4)	*Calculation Agent*. The Calculation Agent shall perform such calculations, adjustments or determinations as specifically required to be made by it pursuant to these Terms and Conditions. Any such calculations, adjustments or determinations shall be final and binding (in the absence of manifest error) on the Issuer, the Bondholders and the other Agents. The Calculation Agent may, if reasonably necessary, consult, at the expense of the Issuer, on any matter (including, but not limited to, any legal matter), any legal or other professional adviser and it shall, absent manifest errors,

Angelegenheiten) rechtliche oder sonstige professionelle Berater einschalten und darf sich hierauf verlassen (soweit kein offenkundiger Fehler vorliegt); die Berechnungsstelle ist insofern nicht haftbar und übernimmt gegenüber den Anleihegläubigern und den anderen Verwaltungsstellen keine Haftung für Handlungen oder Unterlassungen in Bezug auf eine solche Angelegenheit, die in gutem Glauben auf der Einschätzung eines solchen Beraters basieren. Die Berechnungsstelle handelt ausschließlich auf Veranlassung der Emittentin und als deren Erfüllungsgehilfin nach Maßgabe dieser Anleihebedingungen. Die Berechnungsstelle übernimmt in dieser Eigenschaft hierbei keine Verpflichtungen oder ein Auftrags- oder Treuhandverhältnis und ist insofern nicht haftbar und übernimmt gegenüber den Anleihegläubigern und den anderen Verwaltungsstellen keine Haftung für Handlungen oder Unterlassungen in gutem Glauben in Übereinstimmung mit diesen Anleihebedingungen.

be able to rely upon such adviser's opinion; and it shall not be liable and shall incur no liability as against the Bondholders or the other Agents in respect of anything done, or omitted to be done, relating to that matter in good faith in accordance with that adviser's opinion. The Calculation Agent shall act solely upon the request from, and exclusively as agent of, the Issuer and in accordance with these Terms and Conditions of. The Calculation Agent (acting in such capacity) will thereby not assume any obligations towards or relationship of agency or trust with, and shall not be liable and shall incur no liability in respect of anything done, or omitted to be done in good faith, in accordance with these Terms and Conditions as against the Bondholders or the other Agents.

§ 15

KÜNDIGUNGSRECHTE DER ANLEIHEGLÄUBIGER

(1) Jeder Anleihegläubiger ist berechtigt, alle oder einzelne seiner Schuldverschreibungen zu kündigen und deren sofortige Rückzahlung zu ihrem Nennbetrag zu verlangen, falls:

(a) die Emittentin ihre Zahlungsunfähigkeit bekannt gibt oder ihre Zahlungen einstellt; oder

(b) gegen die Emittentin ein Insolvenzverfahren eröffnet wird oder die Emittentin einen Antrag auf Eröffnung eines solchen Verfahrens stellt.

Das Kündigungsrecht erlischt, falls der Kündigungsgrund vor Ausübung des Kündigungsrechts geheilt wurde.

(2) Eine Kündigung der Schuldverschreibungen gemäß § 15(1) ist schriftlich in deutscher oder englischer Sprache gegenüber der Emittentin zu erklären und über die Depotbank des Anleihegläubigers an die Zahlstelle zu übermitteln. Der Benachrichtigung ist ein Nachweis beizufügen, aus dem sich ergibt, dass der betreffende Anleihegläubiger zum Zeitpunkt der Abgabe der Benachrichtigung Inhaber der betreffenden Schuldverschreibung ist. Der Nachweis kann durch eine Bescheinigung seiner Depotbank oder auf andere geeignete Weise erbracht

§ 15

TERMINATION RIGHTS OF THE BONDHOLDERS

(1) Each Bondholder will be entitled to declare all or some only of his Bonds due and demand immediate redemption of such Bonds at the Principal Amount, if:

(a) the Issuer announces its inability to meet its financial obligations or ceases its payments; or

(b) a court opens insolvency proceedings against the Issuer or the Issuer applies for or institutes such proceedings or offers.

The right to declare Bonds due will terminate if the situation giving rise to it has been cured before such right is exercised.

(2) Any notice declaring Bonds due in accordance with § 15(1) shall be made by means of a written declaration in the German or English language delivered through the Bondholder's Custodian to the Paying Agent together with proof that such Bondholders at the time of such notice is a holder of the relevant Bonds by means of a certificate of his Custodian or in any other appropriate manner.

werden.

(3) Wenn eine Schuldverschreibung von einem Anleihegläubiger gemäß diesem § 15 zur vorzeitigen Rückzahlung fällig gestellt wird, kann dieser Anleihegläubiger das Wandlungsrecht für diese Schuldverschreibung ab dem Zugang der Kündigungserklärung bei der Emittentin gemäß § 15(2) nicht mehr ausüben.

(3) If any Bond is declared due for early redemption by a Bondholder pursuant to this § 15, the Conversion Right in respect of such Bond may no longer be exercised by such Bondholder from the time of receipt of the notice of termination by the Issuer pursuant to § 15(2).

§ 16

BEKANNTMACHUNGEN

Die Emittentin wird alle die Schuldverschreibungen betreffenden Mitteilungen außer den in § 18 vorgesehenen Bekanntmachungen, die ausschließlich gemäß den Bestimmungen des SchVG (wie in § 18(1) definiert) erfolgen, auf ihrer Homepage (www.epigenomics.com) bekanntmachen. Jede derartige Mitteilung gilt im Zeitpunkt der so erfolgten Veröffentlichung seitens der Emittentin als wirksam erfolgt.

§ 16

NOTICES

The Issuer will publish all notices concerning the Bonds other than any notices stipulated in § 18 which shall be made exclusively pursuant to the provisions of the SchVG (as defined in § 18(1) below) on its homepage (www.epigenomics.com). Any such notice will be deemed to have been given when so published by the Issuer.

§ 17

VORLEGUNGSFRIST, VERJÄHRUNG

Die Vorlegungsfrist gemäß § 801 Absatz 1 S. 1 Bürgerliches Gesetzbuch für die Schuldverschreibungen beträgt 10 Jahre. Die Verjährungsfrist für Ansprüche aus den Schuldverschreibungen, die innerhalb der Vorlegungsfrist zur Zahlung vorgelegt wurden, beträgt 2 Jahre von dem Ende der betreffenden Vorlegungsfrist an.

§ 17

PRESENTATION PERIOD, PRESCRIPTION

The period for presentation of the Bonds pursuant to § 801(1) sentence 1 of the German Civil Code will be 10 years. The period of limitation for claims under the Bonds presented during the period for presentation will be 2 years calculated from the expiration of the relevant presentation period.

§ 18

ÄNDERUNG DER ANLEIHEBEDINGUNGEN, GEMEINSAMER VERTRETER

(1) *Änderung der Anleihebedingungen.* Die Anleihegläubiger können entsprechend den Bestimmungen des Gesetzes über Schuldverschreibungen aus Gesamtemissionen (Schuldverschreibungsgesetz – "SchVG") durch einen Beschluss mit der in § 9 (2) bestimmten Mehrheit über einen im SchVG zugelassenen Gegenstand eine Änderung der Anleihebedingungen mit der Emittentin vereinbaren. Zur Klarstellung: Die Anleihebedingungen können nicht ohne Zustimmung der Emittentin geändert werden.

Die Mehrheitsbeschlüsse der Anleihegläubiger sind für alle Anleihegläubiger gleichermaßen verbindlich. Ein Mehrheitsbeschluss der Anleihegläubiger, der nicht gleiche Bedingungen für alle Anleihegläubiger vorsieht, ist unwirksam, es sei denn, die benachteiligten Anleihegläubiger stimmen ihrer Benachteiligung ausdrücklich

§ 18

AMENDMENTS TO THE TERMS AND CONDITIONS, JOINT REPRESENTATIVE

(1) *Amendment to the Terms and Conditions*. In accordance with the German Act on Issues of Debt Securities (*Gesetz über Schuldverschreibungen aus Gesamtemissionen* – "SchVG"), the Bondholders may agree with the Issuer on amendments to the Terms and Conditions with regard to matters permitted by the SchVG by resolution with the majority specified in § 9 (2). For the avoidance of doubt, the Terms and Conditions may not be amended without the consent of the Issuer.

Majority resolutions of the Bondholders shall be equally binding on all Bondholders. A majority resolution of the Bondholders which does not provide for identical conditions for all Bondholders is void, unless Bondholders who are disadvantaged have expressly consented to being treated

	zu.		disadvantageously.
(2)	*Mehrheitserfordernisse.* Die Anleihegläubiger entscheiden mit einer Mehrheit von 75 % der an der Abstimmung teilnehmenden Stimmrechte. Beschlüsse, durch welche der wesentliche Inhalt der Anleihebedingungen nicht geändert wird und die keinen Gegenstand des § 5 Absatz 3 Nr. 1 bis Nr. 9 SchVG betreffen, bedürfen zu ihrer Wirksamkeit einer einfachen Mehrheit der an der Abstimmung teilnehmenden Stimmrechte.	(2)	*Majority*. Resolutions shall be passed by a majority of not less than 75 % of the voting rights participating in the voting. Resolutions relating to amendments to the Terms and Conditions which are not material and which do not relate to the matters listed in § 5 (3) nos. 1 to 9 SchVG require a simple majority of the voting rights participating in the vote to be effective.
(3)	*Abstimmung ohne Versammlung*. Alle Abstimmungen werden ausschließlich im Wege der Abstimmung ohne Versammlung durchgeführt. Eine Gläubigerversammlung und eine Übernahme der Kosten für eine solche Versammlung durch die Emittentin findet ausschließlich im Fall des § 18 Absatz 4 Satz 2 SchVG statt.	(3)	*Vote Without a Meeting*. All votes will be made exclusively by vote taken without a meeting. A meeting of Bondholders and the assumption of the fees by the Issuer for such a meeting will only take place in the circumstances of § 18 (4) sentence 2 SchVG.
(4)	*Leitung der Abstimmung*. Die Abstimmung wird von einem von der Emittentin beauftragten Notar oder, falls der gemeinsame Vertreter der Anleihegläubiger zur Abstimmung aufgefordert hat, vom gemeinsamen Vertreter geleitet.	(4)	*Chair of the Vote*. The vote will be chaired by a notary appointed by the Issuer or, if the Bondholders' joint representative has convened the vote, by the joint representative.
(5)	*Stimmrecht.* An Abstimmungen der Anleihegläubiger nimmt jeder Anleihegläubiger nach Maßgabe des aktuellen Nennbetrags oder des rechnerischen Anteils seiner Berechtigung an den ausstehenden Schuldverschreibungen teil. Das Stimmrecht ruht, solange die Schuldverschreibungen der Emittentin oder einem mit ihr verbundenen Unternehmen (im Sinne von § 271 Absatz 2 HGB) zustehen oder für Rechnung der Emittentin oder eines mit ihr verbundenen Unternehmen gehalten werden. Für den Nachweis der Berechtigung zur Teilnahme an der Abstimmung reicht insbesondere ein auf den Tag der Abstimmung datierter, in Textform erstellter besonderer Nachweis der Depotbank des jeweiligen Anleihegläubiger gemäß § 19(4) aus. Kann nur ein auf einen früheren Tag datierter Nachweis beigebracht werden, ist zusätzlich zu einem solchen Nachweis die Vorlage eines Sperrvermerks der Depotbank des jeweiligen Anleihegläubiger erforderlich, aus dem hervorgeht, dass die relevanten Schuldverschreibungen für den Zeitraum ab dem Datum der Bestätigung bis zum Zeitpunkt der Stimmabgabe nicht übertragen werden können.	(5)	*Voting Right*. Each Bondholders participating in any vote shall cast votes in accordance with the current nominal amount or the notional share of its entitlement to the outstanding Bonds. The voting right is suspended as long as the Bonds are attributable to the Issuer or an affiliate (within the meaning of § 271 (2) German Commercial Code) or are held for the account of the Issuer or an affiliate. In particular, a special confirmation in text form dated the date of the vote from the Custodian of the relevant Bondholders is sufficient evidence in accordance with § 19(4) of the eligibility to participate in such vote. If such a confirmation can only be provided dated on an earlier date, then, in addition to such confirmation, a blocking instruction from the Custodian of the relevant Bondholders is required, which evidences that the relevant Bonds are not able to be transferred during the period from the date of such confirmation until the time of the vote.
(6)	*Gemeinsamer Vertreter*. Die Anleihegläubiger können durch Mehrheitsbeschluss zur Wahrnehmung ihrer Rechte einen gemeinsamen Vertreter für alle	(6)	*Joint Representative.* The Bondholders may by majority resolution appoint a joint representative to exercise the Bondholders' rights on behalf of each

Anleihegläubiger bestellen.

Ist der gemeinsame Vertreter zur Beschlussfassung zu Änderungen berechtigt, die einer qualifizierten Mehrheit nach § 18(2) bedürfen, bedarf die Bestellung des gemeinsamen Vertreters derselben qualifizierten Mehrheit.

Der gemeinsame Vertreter hat die Aufgaben und Befugnisse, welche ihm durch Gesetz oder von den Anleihegläubiger durch Mehrheitsbeschluss eingeräumt wurden. Er hat die Weisungen der Anleihegläubiger zu befolgen. Soweit er zur Geltendmachung von Rechten der Anleihegläubiger ermächtigt ist, sind die einzelnen Anleihegläubiger zur selbständigen Geltendmachung dieser Rechte nicht befugt, es sei denn, der Mehrheitsbeschluss sieht dies ausdrücklich vor. Über seine Tätigkeit hat der gemeinsame Vertreter den Anleihegläubiger zu berichten. Für die Abberufung und die sonstigen Rechte und Pflichten des gemeinsamen Vertreters gelten die Vorschriften des SchVG.

Bondholders.

If the joint representative is authorized to resolve on a change that requires a qualified majority pursuant to § 18(2), the appointment of the joint representative also requires such qualified majority.

The joint representative shall have the duties and powers provided by law or granted by majority resolution of the Bondholders. The joint representative shall comply with the instructions of the Bondholders. To the extent that the joint representative has been authorized to assert certain rights of the Bondholders, the Bondholders shall not be entitled to assert such rights themselves, unless explicitly provided for in the relevant majority resolution. The joint representative shall provide reports to the Holders on its activities. The regulations of the SchVG apply with regard to the removal and the other rights and obligations of the joint representative.

§ 19
VERSCHIEDENES

(1) *Anwendbares Recht*. Form und Inhalt der Schuldverschreibungen sowie sämtliche sich aus diesen Anleihebedingungen ergebenden Rechte und Pflichten der Anleihegläubiger, der Emittentin und der Wandlungsstelle bestimmen sich in jeder Hinsicht nach deutschem Recht unter Ausschluss der Kollisionsnormen des deutschen internationalen Privatrechts und werden nach diesem ausgelegt. Soweit gemäß Verordnung (EG) Nr. 864/2007 vom 11. Juli 2007 über das auf außervertragliche Schuldverhältnisse anzuwendende Recht (Rom II) zulässig, unterliegen sämtliche nicht-vertraglichen Ansprüche aus oder im Zusammenhang mit den Schuldverschreibungen deutschem Recht unter Ausschluss der Kollisionsnormen des deutschen internationalen Privatrechts und werden nach diesem ausgelegt.

(2) *Erfüllungsort*. Erfüllungsort ist Berlin, Bundesrepublik Deutschland.

(3) *Gerichtsstand*. Nicht-ausschließlicher Gerichtsstand für alle Rechtsstreitigkeiten aus den in diesen Anleihebedingungen geregelten Angelegenheiten ist Frankfurt am Main, Bundesrepublik Deutschland.

(4) Jeder Anleihegläubiger ist berechtigt, in jedem Rechtsstreit gegen die Emittentin oder in jedem Rechtsstreit, in dem der

§ 19
MISCELLANEOUS

(1) *Governing Law*. The Bonds, with regard to both form and content, as well as all rights and obligations arising from these Terms and Conditions for the Bondholders, the Issuer and the Conversion Agent shall in all respects be governed by, and construed in accordance with, German law without giving effect to the principles of conflict of laws thereof. To the extent permitted pursuant to Council Regulation (EC) No. 864/2007 of 11 July 2007 on the law applicable to non-contractual obligations (Rome II), all non-contractual claims arising out of or in connection with the Bonds are governed by, and are to be construed in accordance with, German law without giving effect to the principles of conflict of laws thereof.

(2) *Place of Performance*. Place of performance shall be Berlin, Federal Republic of Germany.

(3) *Place of Jurisdiction*. Non-exclusive place of jurisdiction for all proceedings arising from matters provided for in these Terms and Conditions shall be Frankfurt am Main, Federal Republic of Germany.

(4) Any Bondholder may in any proceedings against the Issuer or to which the Bondholder and the Issuer are parties protect and

	Anleihegläubiger und die Emittentin Partei sind, seine Rechte aus diesen Schuldverschreibungen im eigenen Namen geltend zu machen gegen Vorlage einer Bescheinigung seiner Depotbank, die (i) den vollen Namen und die volle Anschrift des Anleihegläubigers bezeichnet, (ii) den gesamten Nennbetrag der Schuldverschreibungen angibt, die am Ausstellungstag dieser Bescheinigung den bei dieser Depotbank bestehenden Depots dieses Anleihegläubigers gutgeschrieben sind und (iii) bestätigt, dass die Depotbank dem Clearing System und der Zahlstelle eine schriftliche Mitteilung gemacht hat, die die Angaben gemäß (i) und (ii) enthält und Bestätigungsvermerke des Clearing Systems sowie des betroffenen Kontoinhabers bei dem Clearing System trägt, ohne dass eine Vorlage der Originalbelege oder in einem solchen Verfahren erforderlich wäre.		enforce in his own name his rights arising under his Bonds on the basis of a certificate issued by his Custodian (i) stating the full name and address of the Bondholder, (ii) specifying an aggregate Principal Amount of Bonds credited on the date of such statement to such Bondholder's securities account(s) maintained with his Custodian and (iii) confirming that his Custodian has given a written notice to the Clearing System and the Paying Agent containing the information specified in (i) and (iii) and bearing acknowledgements of the Clearing System and the relevant account holder in the Clearing System, without the need for production in such proceedings of the actual records.
(5)	Die deutsche Version dieser Anleihebedingungen ist allein rechtsverbindlich. Die englische Übersetzung dient lediglich der Information.	(5)	The German version of these Terms and Conditions is legally binding. The English translation is for information purposes only.

4.2. Information about the New Shares

4.2.1. Form, Voting Rights

All shares of the Company including the New Shares are ordinary registered shares with no-par value (*Stückaktien*), each such share representing a notional amount of the Company's issued share capital of EUR 1.00 (together the "**Shares**"). Each Share confers one vote at the general shareholders' meeting of the Company. The voting rights are not restricted.

4.2.2. Dividend Rights and Share in Liquidation Proceeds

The New Shares carry full dividend rights as of the beginning of the financial year of their respective issuance and for subsequent financial years, or in the event that such shares are issued prior to the general shareholders' meeting of the Company resolving on the appropriation of the net profits of the preceding financial year, full dividend rights as from the beginning of the financial year preceding their respective issuance and for subsequent financial years. The New Shares are, upon the respective issuance of each of the New Shares, entitled to a share of any liquidation proceeds or insolvency surpluses at the ratio of their notional share in the share capital.

4.2.3. Stock Exchange Admission, Certificate, Delivery

The decision of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) regarding the admission of the New Shares to trading on the regulated market with simultaneous admission to the sub-segment of the regulated market with additional post-admission obligations (Prime Standard) is expected to be announced on or about September 15, 2021. The New Shares are expected to be deliverable in advance (*vorfristig lieferbar*), which corresponds to the commencement of trading and the inclusion of the New Shares in the existing listing on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*), on or about September 17, 2021.

The New Shares are, upon the respective issuance of each of the New Shares, represented by a global share certificate without dividend coupons deposited with Clearstream. The rights of the shareholders to certificates representing their New Shares are excluded unless the issuance of share certificates is required under the rules applying to a stock exchange to which the Shares are admitted for trading.

4.2.4. ISIN, WKN and Trading Symbol

International Securities Identification Number (ISIN).....	DE000A3H2184
German Securities Code (*Wertpapier-Kenn-Nummer*) (WKN).....	A3H218
Trading Symbol.....	ECX

4.2.5. Transferability of the New Shares

The transferability of the Shares (including, upon the respective issuance, each of the New Shares) is restricted neither by law nor by the Articles of Association of the Company, other than certain limitations for residents of certain jurisdictions, including in particular the United States, as set forth in *3.5.2.2. "— Exercise of Subscription Rights"*.

4.2.6. Notices

Pursuant to the Articles of Association, Company notices are to be published in the German Federal Gazette (*Bundesanzeiger*). Notices regarding the Shares of the Company are also published in the German Federal Gazette.

4.2.7. Online availability of information about the New Shares

Information on the New Shares, including their past performance, their volatility and any analyst estimates of their future performance, can be obtained free of charge on various finance websites, such as, for example, www.finanzen.net, www.onvista.de or www.boerse.de, by looking up the New Shares' ISIN on the respective website.

5. DIVIDEND POLICY

5.1. General Rules on Allocation of Profits and Dividend Payments

Shareholders have a share in the Company's distributable profits determined in proportion to their interest in the Company's share capital. The participation of new shares in the profits may be determined in a different manner.

Distributions of dividends on shares of the Company for a given financial year are generally determined by a process in which the Executive Board and the Supervisory Board submit a proposal for the distribution of dividends to the ordinary general shareholders' meeting held within the first eight months of the subsequent financial year. The general shareholders' meeting then adopts a resolution on such distribution with a simple majority of the votes cast, without being bound by the proposal of the Executive Board and the Supervisory Board. Under German law, dividends can only be resolved upon and paid if the unconsolidated financial statements of the Company show distributable profits (*Bilanzgewinn*). In contrast to the Company's consolidated financial statements, which are prepared in accordance with IFRS, the annual financial statements are prepared in accordance with the accounting principles of the German Commercial Code (*Handelsgesetzbuch*) and other applicable German law. These accounting regulations differ from IFRS in material respects. The unconsolidated financial statements of the Company are approved by the Executive Board and the Supervisory Board unless the Executive Board and the Supervisory Board refer the approval to the general shareholders' meeting. In determining the distributable profits, the profit or loss for the financial year is adjusted for profits or losses carried forward from previous financial years, as well as for withdrawals from, and transfers to reserves. Certain reserves must be maintained by law and must be deducted when calculating the distributable profits. Subject to certain statutory restrictions, the general shareholders' meeting is entitled to transfer additional amounts to the reserves or carry them forward. If the Executive Board and the Supervisory Board approve the unconsolidated financial statements, they may, pursuant to Section 58 para. 2 German Stock Corporation Act, transfer up to 50% of the profit for the financial year remaining after deducting any transfers to statutory reserves and any losses carried forward to non-statutory reserves.

Dividends resolved by the general shareholders' meeting are due and payable on the third business day after the relevant general shareholders' meeting, unless a later maturity is provided for in the dividend resolution, in compliance with the rules of the respective clearing system. Under German law, the right to dividend payments is generally time-barred after three years for the benefit of the Company.

The New Shares are, upon the respective issuance of each of the New Shares, entitled to profit participation beginning as of the beginning of the financial year of their respective issuance and for subsequent financial years. However, in the event that the respective New Shares are issued prior to the general shareholders' meeting of the Company resolving on the appropriation of the net profits of the preceding financial year, such New Shares are entitled to profit participation beginning as of the beginning of the financial year preceding their respective issuance and for subsequent financial years. The dividends will be paid out in accordance with the rules of the clearing system of Clearstream. Details on dividend payments and the respective payment agent will be published in the German Federal Gazette (*Bundesanzeiger*) after the general shareholders' meeting. Neither German law nor the Company's Articles of Association provide for a special procedure for the exercise of dividend rights by shareholders not resident in Germany.

Generally, withholding tax (*Kapitalertragsteuer*) is withheld from dividends paid. Generally, the dividend paying agents are responsible for the withholding of taxes and the Company assumes

responsibility for the withholding of taxes on distributions at source only in accordance with statutory provisions. For more information on the taxation of dividends see *19.1. "Taxation of Shareholders in Germany — Income Tax Implications of the Holding, Sale and Transfer of Shares"*.

5.2. Dividend Policy and Earnings per Share

We have not paid any dividends for the last three financial years. We do not currently intend to pay dividends in the foreseeable future. We intend to retain future earnings, if any, in particular for investments in product development and marketing.

Any future determination to pay dividends to our shareholders will be at the discretion of our Executive Board and Supervisory Board and will depend upon a number of factors, including our results of operations, financial position, future prospects, contractual restrictions, restrictions imposed by applicable law and other factors our Executive Board and Supervisory Board deem relevant.

Even if we were ever to pay dividends, holders of the New Bonds will not be entitled to receive them.

The table below shows the net loss for the period/year and the corresponding net loss per share (basic and diluted) of our Group for the financial years 2020, 2019 and 2018:

	For the Financial Year		
	2020	2019	2018
(in EUR thousand, unless otherwise indicated)		(audited)	
Net loss for the year	(11,686)	(17,020)	(12,692)
Earnings per share (basic and diluted, in EUR)[1]	(2.02)	(0.46)	(0.47)

[1] Earnings per share (basic) are calculated by dividing the net loss for the year by the weighted average number of Shares issued. The outstanding stock options granted by the Company are antidilutive in accordance with IAS 33.41 and 33.43 *Earnings per Share*. Therefore, the earnings per share (diluted) equal the earnings per share (basic). The numbers of Shares issued as of December 31, 2020 amounted to 5,891,230 (December 31, 2019: 43,527,692; December 31, 2018: 36,021,540). As of the date of the Prospectus, the number of shares issued amounts to 12,232,303.

6. CAPITALIZATION AND INDEBTEDNESS

6.1. Capitalization

The following table shows an overview of our capitalization (including total debt) as of June 30, 2021, taken or derived from our accounting records, as well as adjusted for the anticipated net proceeds of EUR 15.15 million from the Offering to be received by the Company.

Investors should read this table in conjunction with *7. "Operating and Financial Review"* and the Consolidated Financial Statements, including the notes thereto, which are included in the financial section of the Prospectus.

	As of June 30, 2021	As of June 30, 2021 (adjusted for the anticipated net proceeds from the Offering)
(in EUR thousand)	**(unaudited)**	
Total current debt (including current portion of non-current debt)[1]	**2,897**	**2,897**
of which, guaranteed	—	—
of which, secured	—	—
of which, unguaranteed/unsecured	2,897	2,897
Total non-current debt (excluding current portion of non-current debt)[2]	**432**	**432**
of which, guaranteed	—	—
of which, secured	—	—
of which, unguaranteed/unsecured	432	432
Shareholder equity[3]	**6,361**	**21,511**
Share capital[4]	11,823	11,823
Legal reserve(s)[5]	88,102	103,252
Other reserves[6]	(93,564)	(93,564)
Total capitalization[7]	**9,690**	**24,840**

1 Reflects "total current liabilities" as shown in the consolidated balance sheet of the Unaudited Consolidated Interim Financial Statements adjusted to include the current portion of non-current debt as of June 30, 2021 in the amount of EUR 20 thousand relating to lease liabilities. For a separate presentation of current financial indebtedness, see *6.2. "— Net Financial Indebtedness"*.

2 Reflects "total non-current liabilities" as shown in the consolidated balance sheet of the Unaudited Consolidated Interim Financial Statements adjusted to exclude the current portion of non-current debt as of June 30, 2021 in the amount of EUR 20 thousand relating to lease liabilities. For a separate presentation of non-current financial indebtedness, see *6.2. "— Net Financial Indebtedness"*.

3 Reflects "total equity" as shown in the consolidated balance sheet of the Unaudited Consolidated Interim Financial Statements.

4 Reflects "subscribed capital" as recorded under "equity" as shown in the consolidated balance sheet of the Unaudited Consolidated Interim Financial Statements. As a result of the conversion of 40,062 notes (*Teilschuldverschreibungen*) of the Mandatory Convertible Bonds 2021/2024 subsequent to June 30, 2021, an amount of EUR 441 thousand was reclassified from "capital reserve" to "subscribed capital".

5 Reflects "capital reserve" as recorded under "equity" as shown in the consolidated balance sheet of the Unaudited Consolidated Interim Financial Statements.

6 Other reserves are the sum of "retained earnings", "net loss for the period" and "other comprehensive income", each as recorded under "equity" as shown in the consolidated balance sheet of the Unaudited Consolidated Interim Financial Statements.

7 Total capitalization represents the sum of "total current debt", "total non-current debt" and "shareholders' equity".

6.2. Net Financial Indebtedness

The following table shows an overview of our net financial indebtedness as of June 30, 2021, taken or derived from our accounting records, as well as adjusted for the anticipated net proceeds of EUR 15.15 million from the Offering to be received by the Company.

Investors should read this table in conjunction with *7. "Operating and Financial Review"* and the Consolidated Financial Statements, including the notes thereto, which are included in the financial section of the Prospectus.

(in EUR thousand)	As of June 30, 2021	As of June 30, 2021 (adjusted for the anticipated net proceeds from the Offering)
	(unaudited)	
A. Cash[1]	6,949	22,099
B. Cash equivalents	—	—
C. Other current financial assets[2]	101	101
D. Liquidity (A)+(B)+(C)	**7,050**	**22,200**
E. Current financial debt (including debt instruments, but excluding current portion of non-current financial debt)[3]	1,798	1,798
F. Current portion of non-current financial debt	20	20
G. Current financial indebtedness (E)+(F)	**1,818**	**1,818**
H. Net current financial indebtedness (G)-(D)	**(5,233)**	**(20,383)**
I. Non-current financial debt (excluding current portion and debt instruments)[4]	447	447
J. Debt instruments[5]	—	—
K. Non-current trade and other payables	—	—
L. Non-current financial indebtedness (I)+(J)+(K)	**447**	**447**
M. Total financial indebtedness (H)+(L)	**(4,785)**	**(19,936)**

1 Reflects "cash and cash equivalents", including pledged or otherwise restricted cash in an amount of EUR 83 thousand, as recorded under "current assets" as shown in the consolidated balance sheet of the Unaudited Consolidated Interim Financial Statements.

2 Reflects "marketable securities", "interest receivables" and "other current financial assets" the latter consisting of "receivables from the Federal Employment Office", "claims under endorsement proceedings" and "security deposit", each as recorded under "current assets" as shown in the consolidated balance sheet of the Unaudited Consolidated Interim Financial Statements.

3 Reflects interest bearing debt, as well as certain other debt, which is expected to result in future cash outflows; current financial debt as of June 30, 2021 includes "trade payables", "current lease liabilities" and "current other financial liabilities", each as included in note 3 to the consolidated balance sheet of the Unaudited Consolidated Interim Financial Statements.

4 Reflects "non-current lease liabilities" as shown in the consolidated balance sheet of the Unaudited Consolidated Interim Financial Statements, adjusted to exclude the current portion of non-current debt as of June 30, 2021 in the amount of EUR 20 thousand relating to lease liabilities.

5 Does not include any outstanding Mandatory Convertible Bonds 2021/2024, which are recognized as "capital reserve" as recorded under "equity".

6.3. Indirect and Contingent Liabilities

As of June 30, 2021, there were no indirect or contingent liabilities other than certain other financial obligations in the amount of EUR 146 thousand and provisions in the amount of EUR 508 thousand. For further information on other financial obligations, see *7.7.6. "Operating and Financial Review — Liquidity and Capital Resources — Other Financial Obligations"*.

6.4. Working Capital Statement

In our opinion, our working capital (for the avoidance of doubt, excluding any proceeds from the Offering) is sufficient to meet our present requirements over at least the next twelve months from the date of the Prospectus.

6.5. No Significant Change

Between June 30, 2021 and the date of the Prospectus, other than the signing on August 17, 2021 of a sale and transfer agreement for the sale of a number of the Company's non-essential blood samples for an aggregate purchase price of USD 6.7 million (subject to certain adjustments), of which an amount of USD 4.7 million was immediately payable upon signing and has been paid as of the date of the Prospectus (see *11.6. "Material Agreements — Blood Sample Sale Agreement"*), no significant change in our financial position has occurred. For information on current trading and management's view on future trends, see *22. "Recent Developments and Outlook"*.

7. OPERATING AND FINANCIAL REVIEW

Our historical results are not necessarily indicative of the results that should be expected in the future. This section includes forward looking statements. Such forward looking statements are subject to risks, uncertainties and other factors that could cause our actual results to differ materially from those expressed or implied by such forward looking statements. We do not undertake any obligation to revise or publicly release the results of any revision to these forward-looking statements.

Investors should read the following discussion and analysis of our financial position and results of operations in conjunction with the additional information contained in the Prospectus, in particular, in the sections 1. "Risk Factors", 6. "Capitalization and Indebtedness", as well as the Consolidated Financial Statements included in the section 20. "Financial Information" of the Prospectus beginning on page F-1.

7.1. Overview

We are a commercial-stage molecular diagnostics company focused on patient-friendly, blood-based IVD tests for the screening and diagnosis of cancer. We develop cancer diagnostic tests, mainly in the colorectal and liver cancer fields.

Our key product, Epi proColon, a blood-based screening test for the detection of colorectal cancer, was approved for sale in the United States by the FDA in April 2016. To our knowledge, Epi proColon is the first and currently only FDA-approved blood-based screening product for the early detection of colorectal cancer in the United States. Since the FDA approval for Epi proColon, we have transitioned into an organization with an increased focus on commercializing our products, in particular our key product, Epi proColon, which we primarily distribute indirectly through sales partnerships, including in our key market, the United States, but also via direct marketing and sales of IVD kits in some other markets, including in Europe.

For additional information on our business, see *10. "Business"*.

7.2. Performance Indicators

We use financial performance indicators to control and monitor the success of our activities on an ongoing basis. The financial indicators used to manage our operations include revenue, gross margin, EBIT, EBITDA, EBITDA before share-based payment expenses, the operating result and earnings per share. Revenue and EBITDA before share-based payment expenses are our key indicators with regard to managing the Group and, therefore, our financial market reporting. As we remain reliant on external funding from investors to support our business operations, our cash consumption is among the important financial indicators and is therefore monitored extremely closely and reported regularly.

The following table shows selected financial performance indicators for the Group where available and, as applicable, for our geographical markets, for the six-month periods ended June 30, 2021 and 2020, as well as the financial years 2020, 2019 and 2018 (for details and a definition of the respective financial performance indicators that are shown below and are not defined by IFRS see *7.2.1. "— Alternative Performance Measures*"):

	Six-Month Period ended June 30,		Financial Year		
	2021	**2020**	**2020**	**2019**	**2018**
(EUR thousand)	**(unaudited)**		**(audited, unless indicated otherwise)**		
Revenue	**223**	**322**	**842**	**1,125**	**1,533**
thereof: Europe	79	135	290	267	296
thereof: North America	144	184	531	714	637
thereof: Rest of the world	0	3	21	144	600
Operating result/Earnings before interest and taxes (EBIT)[1]	**(3,485)**	**(6,321)**	**(11,627)**	**(14,673)**	**(12,895)**
EBIT before depreciation and amortization (EBITDA)	**(3,174)**	**(6,048)**	**(11,092)**	**(14,160)**	**(12,587)**
EBITDA before share-based payment expenses	**(3,165)**	**(5,659)**	**(10,461)**	**(13,287)**	**(11,436)**
Net cash flow[1]	3,284	(2,361)	(6,586)	(6,339)	3,647
Cash consumption	(4,214)	(5,510)	(9,568)	(13,459)	(9,627)
Total liquidity at end of period	6,949*	—	4,527*	11,035*	17,140*

* Unaudited.

[1] Reflects "Net cash flow" as shown in the consolidated statement of cash flows of the Consolidated Financial Statements. Net cash flow is defined as the sum of cash flow from operating activities, cash flow from investing activities and cash flow from financing activities.

7.2.1. Alternative Performance Measures

In accordance with the European Securities and Markets Authority Guidelines on alternative performance measures of October 5, 2015 (the "**ESMA Guidelines**"), this section sets out information related to certain financial measures of the Group that are not defined by IFRS and which we regard as alternative performance measures within the meaning of the ESMA Guidelines:

- Operating result/Earnings before interest and taxes ("**EBIT**") is defined as total comprehensive income for the year before other comprehensive income for the year, taxes on income, other financial result, interest expenses and interest income. EBIT is used by the Group to measure our operating performance adjusted for company-specific financing activities and tax effects.
- EBIT before depreciation and amortization ("**EBITDA**") is defined as total comprehensive income for the year before other comprehensive income for the year, taxes on income, other financial result, interest expenses, interest income, depreciation and amortization. EBITDA is used by the Group to measure our operating performance before depreciation and amortization.
- **EBITDA before share-based payment expenses** is defined as EBITDA adjusted for the line item share-based payment expenses as shown in note 7 to the consolidated statement of comprehensive income of the Audited Consolidated Financial Statements. Share-based payment expenses are defined as the change in the total fair value of all granted stock

options over the financial year. The fair value of granted stock options is determined in accordance with IFRS 2 *Share-based Payment* by simulation of the future movement in the Company's share capital on the basis of market parameters (*e.g.*, volatility and risk free rate) and normal distributed random numbers (so-called Monte Carlo simulation). The fair value of the stock options is expensed over the expected option term of up to four years against the capital reserve. The valuation date is the grant date. EBITDA before share-based payment expenses is one of our key indicators with regard to managing the Group and is, hence, used for our financial market reporting.

- **Cash consumption** is defined as the sum of cash flow from operating activities, cash flow from investing activities less transactions in securities. Cash consumption is used by the Group to manage our liquidity and financing needs. For further details, see also note 33 to the consolidated statement of cash flows of the Audited Consolidated Financial Statements.
- **Total liquidity** is defined as the sum of "cash and cash equivalents" and "marketable securities", each as shown in the consolidated balance sheet of the Consolidated Financial Statements. It is used by the Group as an indicator of our liquidity situation and for our liquidity management.

For the six-month periods ended June 30, 2021 and 2020, as well as the financial years 2020, 2019 and 2018, the following table shows the reconciliation of EBIT, EBITDA and EBITDA before share-based payment expenses to total comprehensive income for the year:

	Six-Month Period ended June 30,		Financial Year		
	2021	2020	2020	2019	2018
(EUR thousand)	**(unaudited)**		**(audited)**		
Total comprehensive income for the year	**(4,118)**	**(6,403)**	**(10,077)**	**(16,939)**	**(13,265)**
– Other comprehensive income for the year	(590)	(49)	1,609	81	(573)
– Taxes on income	(7)	(14)	(23)	(2,454)	738
– Other financial result	(16)	(1)	(2)	(2)	(2)
– Interest expenses	(23)	(30)	(55)	(63)	(550)
– Interest income	3	12	21	172	17
Operating result/Earnings before interest and taxes (EBIT)	**(3,485)**	**(6,321)**	**(11,627)**	**(14,673)**	**(12,895)**
+ Depreciation and amortization	311	273	535	513	308
EBIT before depreciation and amortization (EBITDA)	**(3,174)**	**(6,048)**	**(11,092)**	**(14,160)**	**(12,587)**
+ Share-based payment expenses[1]	9	389	631	873	1,151
EBITDA before share-based payment expenses	**(3,165)**	**(5,659)**	**(10,461)**	**(13,287)**	**(11,436)**

[1] Reflects "Share-based payment expenses" as shown in note 7 to the consolidated statement of comprehensive income of the Audited Consolidated Financial Statements and note 2 to the consolidated statement of comprehensive income of the Unaudited Consolidated Interim Financial Statements, respectively. Share-based payment expenses are defined as the change in the total fair value of all granted stock options over the financial year. The fair value of granted stock options is determined in accordance with IFRS 2 (Share-based Payment) by simulation of the future movement in the Company's share capital on the basis of market parameters (*e.g.*, volatility and risk free rate) and normal distributed random numbers (so-called Monte Carlo simulation). The fair value of the stock options is expensed over the expected option term of up to four years against the capital reserve. The valuation date is the grant date.

The following table shows the reconciliation of cash consumption for the six-month periods ended June 30, 2021 and 2020, as well as the financial years 2020, 2019 and 2018:

	Six-Month Period ended June 30,		Financial Year		
	2021	2020	2020	2019	2018
(EUR thousand)	**(unaudited)**		**(audited)**		
Cash flow from operating activities	(4,223)	(5,516)	(9,571)	(13,506)	(10,351)
+ Cash flow from investing activities	993	6	3	47	724
+ Net proceeds from transactions in securities	984	0	0	0	0
Cash consumption	**(4,214)**	**(5,510)**	**(9,568)**	**(13,459)**	**(9,627)**

The following table shows the reconciliation of total liquidity for the as of June 30, 2021, as well as of December 31, 2020, 2019 and 2018:

		As of December 31,		
	As of June 30,2021	2020	2019	2018
(EUR thousand)	**(unaudited)**	**(audited, unless indicated otherwise)**		
Cash and cash equivalents	6,949	3,566	10,155	16,487
+ Marketable securities	0	961	880	653
Total liquidity	**6,949**	**4,527***	**11,035***	**17,140***

* Unaudited.

We present these non-IFRS measures as (i) they are used by our management to measure operating performance, including in presentations to the members of the Executive Board and our Supervisory Board, and as a basis for strategic planning and forecasting, and (ii) they represent similar measures that we believe are widely used by certain investors, securities analysts and other parties as supplemental measures of operating and financial performance. These non-IFRS measures may enhance management's and investors' understanding of our financial performance and liquidity by excluding items that are outside of our ongoing operations, such as taxes on income, costs of capital and non-cash expenses. For example, we believe that EBITDA is widely used by investors to measure our operating performance before depreciation and amortization in particular because depreciation and amortization under IFRS can vary substantially from company to company depending on the accounting methods, carrying amount of assets, and capital structure or method by which assets were acquired and are therefore less comparable as a result.

However, these non-IFRS measures are defined by us and may not be comparable to similarly titled or other similar measures used by other companies, have limitations as analytical tools and should not be considered in isolation or as a substitute for analysis of our operating results as reported under IFRS. The non-IFRS measures are not measurements of our performance or liquidity under IFRS and should not be considered as alternatives to total comprehensive income for the year or any other performance measures derived in accordance with IFRS or any other generally accepted accounting principles or as alternatives to cash flow from operating, investing or financing activities. Prospective investors should bear in mind that these non-IFRS measures have limitations as analytical tools and should not place reliance in these non-IFRS measures.

7.2.2. Non-Financial Performance Indicators

In addition, we use certain non-financial performance indicators which primarily relate to our R&D and commercial activities. These non-financial performance indicators include sensitivity and specificity numbers for our products as obtained from scientific studies and the results of studies published in renowned scientific journals, as well as the number of tests performed using our products. Progress in obtaining market approval from health authorities, the successful passing of audits of our quality management system, as well as reaching benchmarks and milestones in our development activities are further important indicators in measuring achievement of our targets and in helping us manage our internal activities and external communication. Last but not least, we monitor customer satisfaction using indicators such as delivery and/or turnaround times, number and nature of audit findings and complaint rates.

7.3. Key Factors Affecting Results of Operations, Financial Position and Cash Flows

We believe that the factors discussed below had significantly affected our results of operations, financial position and cash flows in the six-month period ended June 30, 2021, as well as the financial years 2020, 2019 and 2018, and expect that these factors will continue to have a material influence on our results of operations, financial position and cash flows in the future.

For a discussion of certain factors that may adversely affect our results of operations, financial position and cash flows, see also *1. "Risk Factors"*.

7.3.1. Commercialization of our Key Product and Product Candidates

As a molecular diagnostics company, we focus on developing molecular cancer diagnostic tests, in particular IVD tests that use our proprietary biomarkers in highly regulated markets for the screening, early detection and diagnosis of cancer.

With respect to our products, we are focused on the commercialization of Epi proColon in the United States, which we have identified as a key market for us, currently in partnership with our commercial partner for North America, Polymedco Cancer Diagnostics Products LLC, New York, United States ("**Polymedco**"). This is underlined by the fact that in 2020, product sales made up 69.3% of our overall revenue, with the largest share (63.1%) generated through our business in the United States. Polymedco is a well-established and experienced company that has been successfully marketing and selling diagnostics tests in North America for years. On September 28, 2018, we entered into an amended and restated joint commercialization agreement with Polymedco (as amended, the "**Sales Partnership Agreement**"; see *11.3. "Material Agreements — Sales Partnership Agreement with Polymedco"*). Under the Sales Partnership Agreement, Polymedco acts as a sales and marketing agent in the United States on a commission basis to distribute Epi proColon to clinical and genetic laboratories ("**Laboratory Customers**"). Accordingly, the agreement gives us access to existing sales and marketing channels that we would have had to build up on our own without this partnership.

We have made progress in achieving U.S.-wide availability for Epi proColon, and the test has since its approval been offered though major laboratory chains in the United States (*e.g.*, LabCorp and ARUP). Another factor which we believe had a positive effect on our commercialization effort in the United States was the inclusion of Epi proColon in the guidelines of the National Comprehensive Cancer Network ("**NCCN**") in April 2020. We have also been working on reimbursement for the test, specifically by Medicare, a national health insurance program in the United States which we estimate covers approximately 40% of potential patients who could be tested using Epi proColon in the United

States (*i.e.,* patients 65 to 75 years of age; estimate based on U.S. census data on health insurance coverage as of 2020) ("**Medicare**"). In the summer of 2018, the U.S. Centers for Medicare & Medicaid Services ("**CMS**") incorporated our Septin9 test in the fee schedule at USD 192.00 with effect from January 1, 2019. However, on January 19, 2021, CMS issued a final non-coverage decision for Epi proColon as part of the NCD for blood-based biomarker tests. The decision argued, among other things, that Epi proColon does not meet the criteria for an appropriate blood-based biomarker CRC screening test, in particular, regarding its level of sensitivity and specificity. We believe that such performance criteria are arbitrary and in conflict with scientific evidence which, in our opinion, the decision did not adequately take into account. We are therefore currently evaluating options regarding the decision by CMS (for details on the proceedings, see *10.7.2 "Business — Epi proColon Medicare Reimbursement — Medicare Coverage*).

In addition, we intend to pursue the further development of our key product candidate, Epi proColon Next-Gen, in the United States, which is a yet more advanced version of our CRC screening blood test. While the test is still under development and will take at least a few years before it reaches market readiness (if ever), we believe it has the potential to meet the sensitivity and specificity requirements set out in the NCD and, thus achieve Medicare coverage.

In Europe, we sell a slightly modified version of the product under the name Epi proColon 2.0 CE directly or through distributors in countries with established screening policies, including select European markets. However, as direct payor segments are small in most European markets and need to be addressed individually at the level of physicians and/or patients, we only have a limited focus on commercializing Epi proColon 2.0 CE in Europe.

Our customers can currently be categorized in three groups:

- In the United States, we sell our products to Laboratory Customers either directly or through our commercial partner Polymedco, to which we pay a commission fee on a per-test basis;
- In certain countries, we sell our products to regional distributors, which hence qualify as our direct customers. These commercial partners in turn sell our products to Laboratory Customers, which are generally our indirect customers; and
- In certain other countries, including, *inter alia*, some European and Asian countries, we also sell our products directly to Laboratory Customers and other smaller customers, such as clinics and researchers, with currently only small ordering volumes.

In the future, we strive for the inclusion of Epi proColon (and other products and product candidates, once approved) in official guidelines, which we believe to be used by health care payors as input for their payment determinations and to have a great influence on reimbursement decisions and commercial adoption. Such decisions are expected to significantly affect our future results of operations. In particular, we expect guideline inclusion and final reimbursement decisions in the United States to affect our revenue from product sales. For further details on reimbursement and guideline inclusion, see also *10.7. "Business — Epi proColon Medicare Reimbursement"* and *1.1.3. "Risk Factors— Risks Related to our Business — Our success in commercializing Epi proColon and other (future) products depends in particular on reimbursement from government and health administration authorities, such as Medicare, or other third-party payors like private health insurers. As Medicare coverage for Epi proColon, our most important product, was recently denied, it is highly uncertain if and when such success will be achieved."*

7.3.2. Trends, Conditions and Expected Developments in our Market

Global health care has seen a trend of low level capital expenditure over many years and the global health environment in affluent countries continues to be marked by healthcare reforms and pressure

on cost and price. According to the Deloitte 2021 Global Health Care Outlook, in particular due to COVID-19, the combined public and private health care spending is estimated to have been fallen globally by 2.6% in 2020 with a recovery being expected in 2021, in particular due to aging and growing populations and greater prevalence of chronic diseases, as well as economic recovery. Accordingly, between 2020 and 2024, global health spending is expected to rise at a compound annual growth rate ("**CAGR**") of 3.9% up from to 2.8% in the period of 2015 to 2019. As in previous years, the highest growth rates for the health care industry going forward are expected in Asia and Australasia (5.3%) and the transition economies of Central and Eastern Europe (5.2%), while spending growth in Latin America is anticipated to remain under-average (source: Deloitte 2021 Global Health Care Outlook).

This trend is also expected to fuel the global market for molecule diagnostics. According, to Grand View Research, the size of the market we operate increased from approximately USD 10.1 billion in 2020 (source: Grand View Research 2020) to approximately USD 43.9 billion in 2021 and is anticipated to register a CAGR of 3.9% between 2021 and 2028 to reach an estimated value of approximately USD 49.3 billion by 2028 (source: Grand View Research 2021). However, much on this extraordinary growth is to be attributed to effects from the COVID-19 pandemic which cause an unprecedented rise in demand for COVID-19 testing capacities that we do not serve with our products. In contrast, Allied Market Research estimates the global molecular diagnostics market at approximately USD 17.8 billion in 2021 and predicts it to grow to approximately USD 31.8 billion by 2026 at a CAGR of 12.3% during the period from 2021 to 2026, due to the increasing prevalence of infectious diseases and cancer, the rising funding for R&D, the increase in point-of-care testing devices and technological advancements.

Due to its size, well-developed healthcare system and leading role in cancer research, we consider the United States to be the most attractive single market for our products, in particular our key product, Epi proColon, as well as current product candidates. This view accords with that of market researches, which consider North America the industry leader and largest revenue generating region for molecular diagnostics in 2019 and likely to remain in this position at least until 2027 (source: Grand View Research 2021). We believe that due to the high prevalence of, and large at-risk population for, cancers such as colorectal, lung and liver cancer in the United States, there is a potentially significant market for IVD screening tests such as our Epi proColon and, if approved in the future, our blood test ("**HCCBloodTest**") for the identification of hepatocellular carcinoma ("**HCC**").

As regards the Asian market, we believe that increased awareness of personalized medicine, large and aging populations with increasing income, as well as improved healthcare in the Asia-Pacific region may in the future be impacting demand for our products and thus affect our results of operations, financial position and cash flows.

Additionally, we believe the overall competitive situation to influence our business, in particular, as we are a small company in a market in which we compete with large competitors. The diagnostics market as a whole remains fairly consolidated, with competitors ranging large European players (*e.g.*, Roche, Bayer, Siemens Healthineers, Qiagen, BioMerieux), Sysmex from Japan and United States companies (*e.g.*, Abbott, Hologic, Becton Dickinson) to small companies like Epigenomics. Competing with large competitors might make it difficult for us to penetrate our markets and hence impede our results of operations, financial position and cash flows.

In the financial year 2020 and the first month of the financial year 2021, COVID-19 has negatively impacted the global economy, disrupted global supply chains, as well as created significant volatility and disruption of financial markets, and in turn has had negative effects on our business. For example, in the United States in April 2020, screenings for breast, colon, prostate, and lung cancers

were lower by 85%, 75%, 74%, and 56%, respectively, compared to April 2019 (source: Study on the Impact of COVID-19 on Cancer Care). Reflecting this development, we saw a significant decrease in the sale of our tests in the United States, see also *7.5.1.1. "— Comparison of the Results of Operations for the Six-Month Periods ended June 30, 2021 and 2020, as well as the Financial Years 2020, 2019 and 2018 — Revenue — Comparison of Revenue for the Six-Month Periods ended June 30, 2021 and 2020".*

In addition, many clinical trial and regulatory reviews and approvals, including those currently conducted by us or our commercial partners such as, in particular, our clinical studies in the United States, and in particular, our post-approval study for our key product Epi proColon following FDA approval, experienced substantial delays as a result of COVID-19, the related containment measures, limitations or redirection of human or material resources and the overall stress placed on the administrative apparatus and health care system. In many cases patients were no longer included because they did not show up for their appointments or the clinical test facilities had been closed for safety reasons. Furthermore, the laboratories also increasingly prioritized tests for COVID-19. Other effects included an overall reduced productivity, including of our R&D activities, resulting from remote working arrangements and limited resources due to, for example, short-time work (*Kurzarbeit*) at our Berlin site as from April 2020 until presumably at least the end of 2021. Any of these and other unforeseen effects resulting from COVID-19 may continue for as long as the pandemic is not fully under control or in case of long-term consequences such as a global recession even beyond that.

For additional information on our relevant markets, their past and expected future development and the competition that we face in these markets, see also *9. "Markets and Competitive Environment".*

7.3.3. Funding and Liquidity

Our ability to obtain funding has significantly affected our financial position and cash flows in the past. Since inception, we have incurred significant operating losses. In particular, we incurred a net loss period in the six-month period ended June 30, 2021 (EUR 3,528 thousand) and financial years 2020 (EUR 11,686 thousand), 2019 (EUR 17,020 thousand) and 2018 (EUR 12,692 thousand), respectively, see also *7.5.11. "— Comparison of the Results of Operations for the Six-Month Periods ended June 30, 2021 and 2020, as well as the Financial Years 2020, 2019 and 2018 — Net Loss for the Period/Earnings per Share"*.

In particular, our business model is characterized by high research and development expenses, as well as selling, general and administrative costs, which we currently cannot solely fund by our cash flow from operating activities, as highlighted by the high levels of cash consumption in the six month-period ended June 30, 2021 (EUR 4,214 thousand) and financial years 2020 (EUR 9,568 thousand), 2019 (EUR 13,459 thousand) and 2018 (EUR 9,627 thousand). In addition, we have only very limited revenue which further declined in recent years from EUR 1,533 thousand in 2018 to EUR 842 thousand in 2020 and further to EUR 223 thousand by June 2021, see also *7.5.1. "— Comparison of the Results of Operations for the Six-Month Periods ended June 30, 2021 and* 2020, as well as the Financial Years *2020, 2019 and 2018 — Revenue"*. Hence, in the past we regularly had to raise additional funds. Although in 2020, compared to 2019, our R&D costs and SG&A costs declined significantly, which was mainly due to COVID-19 (for details, see *7.5.5. "— Comparison of the Results of Operations for the Six-Month Periods ended June 30, 2021 and 2020, as well as the Financial Years 2020, 2019 and 2018 — R&D Costs" and 7.5.6. "— Comparison of the Results of Operations for the Six-Month Periods ended June 30, 2021 and 2020, as well as the Financial Years 2020, 2019 and 2018 — SG&A Costs"*), we anticipate that our need to raise additional funds will continue for the foreseeable future.

Our cash and funding sources have in the past included cash contributions from capital increases, the issuance of convertible notes and public funding, for example via investment subsidies and research grants. Most recently, in May 2021, we raised net proceeds of EUR 2.09 million from a capital increases by way of private placement. Also, on August 17, 2021, the Company, as seller, entered into a sale and transfer agreement with New Horizon Health Limited, as purchaser, for the sale of a number of the Company's non-essential blood samples for an aggregate purchase price of USD 6.7 million (subject to certain adjustments, see *11.6. "Material Agreements — Blood Sample Sale Agreement"*). In addition, we target net proceeds of approximately EUR 15.15 million from the Offering and intend to use such proceeds to finance our operations, in particular to finance the development of the product candidate and blood-based colorectal cancer screening test, Epi proColon Next-Gen, pursuing the commercialization of the blood-based colorectal cancer screening test Epi proColon, as well as for general corporate purposes.

For more information on our cash and funding sources in the six-month period ended June 30, 2021 and financial years 2020, 2019 and 2018, see *7.7.5. "— Liquidity and Capital Resources — Cash and Funding Sources"*.

However, such funding sources will not be sufficient to reach the cash flow break-even point in the future and we will need to raise additional funds through public or private equity or debt financings, including grants from public institutions, corporate collaborations or licensing arrangements to continue to fund or expand our operations and our ability to raise additional funds will significantly affect our financial position and cash flows in the future, see also *1.5.1. "Risk Factors — Financial Risks — Due to our significant consumption of cash, we regularly require new capital to finance our business operations, the current capital measure will not be sufficient to reach the cash flow break-even point even in a positive scenario and if we cannot raise sufficient capital when needed, we may have to curtail or cease operations and/or file for insolvency proceedings."* For example, we had planned a private placement of new shares for early March 2020 which we had to postpone due to significant fluctuations of our share price as a result of the turbulence on the stock markets in the wake of the first wave of COVID-19. When we were finally able to execute the transaction, we achieved substantially less proceeds than initially expected.

In light of our constant need to raise additional funds, we have initiated a structured process in February 2021 to explore and evaluate alternative strategic options (for details, see *10.3.2. "Business — Our Strategy — Evaluation of Strategic Options"*).

Moreover, due to the limitations of our current funding, we are currently focusing on the commercialization of Epi proColon, while we have put other plans on hold for the time being. In case we were to achieve additional funding, we expect to prioritize the further development of our HCCBloodTest. Thereafter, we aim to use any remaining additional funding to optimize Epi proLung. For further details on our operational strategy, see *10.3.1. "Business — Our Strategy — Operational Strategy"*.

7.3.4. Personnel Costs and Share Based Payment Expenses

Our results of operations, financial position and cash flows have in the past been significantly impacted by personnel costs. In the preceding six month period ended June 30, 2021 and last three financial years, we have incurred total personnel costs of EUR 1.932 thousand (six-month period ended June 30, 2021), EUR 5,326 thousand (2020), EUR 6,762 thousand (2019), and EUR 7,346 thousand (2018), respectively. As of June 30, 2021, we employed 31 people (headcount) (as of December 31, 2020: 37; 2019: 41; 2018: 44). Of these, 25 employees were employed by the Company and the remaining 6 by our U.S. subsidiary.

A considerable part of these personnel costs were related to share-based payment expenses for stock options granted. Measurement of stock options granted gave rise to share-based payment expenses of EUR 9 thousand in the six-month period ended June 30, 2021, EUR 631 thousand in 2020, EUR 873 thousand in 2019 and EUR 1,151 thousand in 2018, respectively. We launched stock option programs in 2016, 2017 and 2019, respectively, as incentive schemes especially for our senior management team, but as well for all other staff members, see also *16.5. "Governing Bodies — Stock Option Programs"*. The initial stock options have been adjusted with regard to the number of rights and exercise prices through a resolution by the Executive Board and the Supervisory Board on January 29, 2021 following the consolidation of shares resolved by the general shareholders' meeting of the Company on November 27, 2020 (for details, see *16.5.1. "Governing Bodies — Stock Option Programs — Terms of Stock Option Programs"*). In April 2018, we initially issued 366,250 rights (adjusted to reflect the consolidation of shares: 45,780 rights) and 318,750 rights (adjusted to reflect the consolidation of shares: 39,837 rights) from the SOP 16-18 and the SOP 17-19, respectively. The exercise price of these rights was initially set at EUR 4.12 per Share (adjusted to reflect the consolidation of shares: EUR 32.96) and these newly issued stock option rights will not be exercisable before April 2022. In April 2019 we have initially issued further 611,170 rights (adjusted to reflect the consolidation of shares: 76,393 rights) from the SOP 17-19. The exercise price of these rights was initially set at EUR 1.92 per Share (adjusted to reflect the consolidation of shares: EUR 15.36) and these newly issued stock option rights will not be exercisable before April 2023. In April 2020 we have initially issued further 541,850 rights (adjusted to reflect the consolidation of shares: 67,728 rights) from the SOP 19-21. The exercise price of these rights was initially set at EUR 2.50 per Share (adjusted to reflect the consolidation of shares: EUR 20.00) and these newly issued stock option rights will not be exercisable before April 2024.

In the financial year 2020 and the six-month period ended June 30, 2021, personnel costs were extraordinarily affected by COVID-19 and the related containment measures through remote working arrangements and, most notably, continuous short-time work (*Kurzarbeit*) at our Berlin sites since April 2020 which resulted in substantial cost reductions. Employees who left our Group during the financial year 2020 were not replaced for the moment. In addition, the Executive Board and Supervisory Board agreed to waive part of their compensation for the further duration of the measures associated with COVID-19. We expect these effects of COVID-19 to continue for the time being.

7.3.5. Deferred Taxes

The Company had total deferred tax assets in an amount of EUR 73,153 thousand (estimate as of December 31, 2020), EUR 70,420 thousand (December 31, 2019) and EUR 66,033 thousand (December 31, 2018), which related to tax loss carryforwards in Germany and the United States.

As of December 31, 2020, the Company's overall tax loss carryforwards in Germany were estimated at EUR 219 million for corporate income tax and EUR 217 million for trade tax. In accordance with German tax law, tax losses have principally an unlimited carryforward period. As a consequence of completed tax audits, tax loss carryforwards in the amount of EUR 167 million were undisputed as of June 30, 2021. Due to the current financial situation of the Company, without sufficient liquidity to achieve the break-even point, valuation allowances have been recognized for the calculated exceeding amount of deferred tax assets. Thus, the Company did not recognize any deferred tax assets with respect to the tax loss carryforwards in Germany on its balance sheet as of June 30, 2021 and December 31, 2020, 2019 and 2018.

Historically, the Company had recognized deferred tax assets in connection with tax loss carryforwards of Epigenomics, Inc. and temporary differences between IFRS and U.S. tax law, because, at that time, it was viewed as highly likely that the Company would use the tax loss

carryforwards of Epigenomics, Inc. in subsequent years. Taking into additional consideration the expected duration of the administrative procedure at CMS and the Company's adjusted business planning, the Company has postponed until future years the date on which it expects an initial opportunity for use. Against this backdrop and in line with the requirements of IFRS, the Company did not continue to recognize its tax assets in the United States. Deferred tax assets recognized at that time amounting to EUR 2,375 thousand were therefore written off in full in the financial year 2019 and tax expenses of EUR 2,454 thousand were recognized in the financial year 2019.

For more information on the risks associated with the loss of our tax loss carryforwards, see *1.5.4. "Risk Factors — Financial Risks — We could be required to pay additional taxes as a result of the loss of our tax loss carryforwards or our R&D tax credit."*

7.4. Comparability of our Financial Statements as a Result of the Application of New and Revised IFRS

From the financial year 2019 onwards, we applied the new IFRS 16 (Leases), the first-time adoption of which had an effect on our Audited Consolidated Interim Financial Statements 2019 and 2020. When first applying the modified retrospective model, we opted for the transitional relief for short-term leases and low-value assets.

As a result of the first-time application of the new IFRS 16 (Leases), liabilities from our rental agreements are no longer treated as off-balance-sheet obligations, but were recognized as liabilities as of January 1, 2019 (Berlin) and April 2019 (San Diego), respectively. Correspondingly, based on the current contractual situation and parameters, the rental agreement of the Company was capitalized as a non-current asset in the amount of EUR 685 thousand as of January 1, 2019. This value takes into account our contractually agreed option to extend the contract until April 30, 2026. The rental agreement of our U.S. subsidiary was capitalized as a non-current asset in the amount of EUR 393 thousand in April 2019. These reclassifications led to an extension of the balance sheet and a reduction in the equity ratio compared with the closing balance sheet for the 2018. The statement of comprehensive income now shows amortization and interest expense from the leases in question instead of the rental expense previously recognized, which led to a slight improvement in EBIT, EBITDA and EBITDA before share-based payment expenses.

For further details see "*Application of new and revised IFRS and interpretations and effects on the Company's consolidated financial statements for the fiscal year 2019*" contained in the notes to the Consolidated Financial Statements 2019 (page F-58 et seqq. of the Prospectus).

7.5. Comparison of the Results of Operations for the Six-Month Periods ended June 30, 2021 and 2020, as well as the Financial Years 2020, 2019 and 2018

The following table sets forth our consolidated statement of profit or loss and other comprehensive income for the six-month periods ended June 30, 2021 and 2020, as well as the financial years 2020, 2019 and 2018:

	Six-Month Period ended June 30,			Financial Year				
	2021	Change (in %)	2020	2020	Change (in %)	2019	Change (in %)	2018
(EUR thousand, unless otherwise indicated)	(unaudited)			(audited)	(unaudited)	(audited)	(unaudited)	(audited)
Revenue	**223**	**(30.7)**	**322**	**842**	**(25.2)**	**1,125**	**(26.6)**	**1,533**
Cost of sales	(49)	31.0	(71)	(145)	42.7	(253)	42.5	(440)
Gross profit	**174**	**(30.7)**	**251**	**697**	**(20.1)**	**872**	**(20.2)**	**1,093**
Gross margin (in %)	78.0	0.0	78.0	82.8	6.8	77.5	8.7	71.3
Other income	1,562	104.5	764	1,507	(39.4)	2,488	72.7	1,441
Research and development costs	(1,545)	43.9	(2,754)	(3,659)	50.2	(7,340)	(14.4)	(6,418)
Selling, general and administrative costs	(3,021)	22.6	(3,901)	(7,301)	18.3	(8,935)	(2.7)	(8,703)
Other expenses	(655)	3.8	(681)	(2,871)	(63.3)	(1,758)	(470.8)	(308)
Operating result/earnings before interest and taxes (EBIT)	**(3,485)**	**44.9**	**(6,321)**	**(11,627)**	**20.8**	**(14,673)**	**(13.8)**	**(12,895)**
Interest income	3	(75.0)	12	21	(87.8)	172	911.8	17
Interest expenses	(23)	23.3	(30)	(55)	12.7	(63)	88.5	(550)
Other financial result	(16)	(1,500.0)	(1)	(2)	0.0	(2)	0.0	(2)
Net loss for the period before taxes on income	**(3,521)**	**44.5**	**(6,340)**	**(11,663)**	**19.9**	**(14,566)**	**(8.5)**	**(13,430)**
Taxes on income	(7)	50.0	(14)	(23)	99.1	(2,454)	n/a	738
Net loss for the period	**(3,528)**	**44.5**	**(6,354)**	**(11,686)**	**31.3**	**(17,020)**	**(34.1)**	**(12,692)**
Items that may be reclassified subsequently to profit or loss:								
Exchange rate differences from the conversion of foreign entities	(629)	(2,759.1)	(22)	1,528	n/a	(147)	(54.2)	(321)
Fair value adjustment of financial instruments measured at fair value through other comprehensive income	39	n/a	(27)	81	64.5	228	n/a	(252)
Other comprehensive income for the period	**(590)**	**(1,104.1)**	**(49)**	**1,609**	**1,886.4**	**81**	**n/a**	**(573)**
Total comprehensive income for the period	**(4,118)**	**35.7**	**(6,403)**	**(10,077)**	**40.5**	**(16,939)**	**(27.7)**	**(13,265)**
Earnings per share (basic and diluted) in EUR	**(0.41)**	**66.1**	**(1.21)[1]**	**(2.02)**	**(339.1)**	**(0.46)[1]**	**2.1**	**(0.47)**

[1] When restated to account for the consolidation of shares resolved by Company's general shareholders' meeting in November 2020, earnings per share (basic and diluted) in EUR for the financial year 2019 were (3.65) and (0.14) for the six-month period ended June 30, 2020.

7.5.1. Revenue

Our revenue comprises (i) revenue from product sales (own and third-party), (ii) revenue from sale of non-capitalized property rights, (iii) licensing income, and (iv) R&D income and reimbursements.

Revenue from product sales (own and third-party) includes sales made through our own sales channels and distribution partners and royalties received from third parties that render services (such as laboratory-developed tests ("**LDTs**")) based on our products to third parties. We generate licensing income by out-licensing of our intellectual property (e.g., technologies, biomarkers) to third

parties. We generate R&D income and reimbursements by rendering services in connection with contract research and by charging pass-through costs to third parties.

The following table sets forth our revenue by type for the six-month periods ended June 30, 2021 and 2020, as well as the financial years 2020, 2019 and 2018:

	Six-Month Period ended June 30,				Financial Year					
	2021		2020		2020		2019		2018	
	(unaudited)				(audited)					
	(EUR thousand)	(% of total)	(EUR thousand)	(% of total)	(EUR thousand)	(% of total)	(EUR thousand)	(% of total)	(EUR thousand)	(% of total)
Product sales (own and third-party	210	94.4	293	90.9	584	69.3	988	87.8	808	52.7
License revenue	13	5.6	19	6.0	33	4.0	137	12.2	636	41.5
R&D revenue and reimbursements	0	0.0	10	3.1	225	26.7	0	0.0	46	3.0
Other revenue	—	—	—	—	0	0.0	0	0.0	43	2.8
Total revenue	**223**	**100.0**	**322**	**100.0**	**842**	**100.0**	**1,125**	**100.0**	**1,533**	**100.0**

The following table sets forth our revenue by geographical market:

	Six-Month Period ended June 30,				Financial Year					
	2021		2020		2020		2019		2018	
	(unaudited)				(audited)					
	(EUR thousand)	(% of total)	(EUR thousand)	(% of total)	(EUR thousand)	(% of total)	(EUR thousand)	(% of total)	(EUR thousand)	(% of total)
Europe	79	35.4	135	41.9	290	34.4	267	23.8	296	19.3
North America	144	64.7	184	57.1	531	63.1	714	63.4	637	41.6
Asia	—	—	—	—	21	2.5	135	12.0	598	39.0
Rest of the world	0	0.0	3	1.0	0	0.0	9	0.8	2	0.1
Total revenue	**223**	**100.0**	**322**	**100.0**	**842**	**100.0**	**1,125**	**100.0**	**1,533**	**100.0**

7.5.1.1. Comparison of Revenue for the Six-Month Periods ended June 30, 2021 and 2020

In the six-month period ended June 30, 2021, our revenue decreased by EUR 99 thousand, or 30.7%, to EUR 223 thousand, compared to EUR 322 thousand in the six-month period ended June 30, 2020.

The major part of this decrease was attributable to the revenue development from product sales (own and third party) in the first quarter of 2021 where we saw a decrease in the United States and Europe. In contrast, in the second quarter of 2021, we realized increased revenue from product sales (own and third party) as compared to the prior year's period as travel and other restrictions in order to reduce the spread of the disease, including public health directives and orders, in the United States and Europe were (partially) lifted. Overall, revenue in the six-month period ended June 30, 2021, particularly revenue from product sales in the United States, still remained on a low level due to the lasting effects of the COVID-19 pandemic and associated containment measures which resulted in elective procedures and screening exams for cancer having been delayed or canceled (see also *9.4. "Markets and Competitive Environment — Impact of COVID-19 on our markets"*). In comparison, the six-month period ended June 30, 2020, particularly the first quarter of 2020, was less impacted by the effects of COVID-19. Additionally, sales have been affected by the delay in obtaining a reimbursement decision from CMS in 2020 (on January 19, 2021, CMS denied our formal request for coverage of Epi proColon under Medicare, see also *10.7.2. "Business — Epi proColon Medicare Reimbursement — Medicare Coverage"*).

In addition, license revenue also declined by EUR 6 thousand, or 31.5%, from EUR 19 thousand in the six-month period ended June 30, 2020 to EUR 13 thousand in the six-month period ended June 30, 2021.

Moreover, R&D revenue and reimbursements decreased to EUR nil thousand in the six-month period ended June 30, 2021, from EUR 10 thousand in the six-month period ended June 30, 2020 which was an one-time effect due to R&D services rendered to a customer.

Broken down by region, revenue in North America decreased by EUR 40 thousand, or 21.7%, from EUR 184 thousand in the six-month period ended June 30, 2020 to EUR 144 thousand in the six-month period ended June 30, 2021, representing 64.7% of our total revenue in the six-month period ended June 30, 2021 (compared to 57.1% in the six-month period ended June 30, 2020), in line with the decline in revenue from product sales, as explained above.

In addition, revenue in Europe decreased by EUR 56 thousand, or 41.5%, from EUR 135 thousand in the six-month period ended June 30, 2020 to EUR 79 thousand in the six-month period ended June 30, 2021, representing 35.3% of our total revenue in the six-month period ended June 30, 2021, compared to 41.9% in the six-month period ended June 30, 2020. This decrease was again due to effects of the COVID-19 pandemic and associated containment measures.

Revenue in the rest of the world (now including Asia due to the discontinuation of our activities in that region) also decreased by EUR 3 thousand, or 100.0%, from EUR 3 thousand in the six-month period ended June 30, 2020, which related to our minimal remaining activities in Asia in that period, to EUR nil thousand in the six-month period ended June 30, 2021, as we have focused our business activities on the United States and Europe in the meantime.

7.5.1.2. Comparison of Revenue for the Financial Years 2020 and 2019

In 2020, total revenue decreased by EUR 283 thousand, or 25.2%, to EUR 842 thousand from EUR 1,125 thousand in 2019.

The major part of this decrease was attributable to revenue from product sales (own and third party), which decreased by EUR 404 thousand, or 40.9%, from EUR 988 thousand in the financial year 2019 to EUR 584 thousand in the financial year 2020, representing 69.3% of our total revenue in the financial year 2020 (compared to 87.8% in 2019). This was primarily due to the effects of the COVID-19 pandemic and associated measures aiming to reduce the spread of the disease from March 2020 onwards, as a result of which elective procedures and screening exams for cancer have been delayed or canceled (see also *9.4. "Markets and Competitive Environment — Impact of COVID-19 on our markets"*). Additionally, sales have been affected by the delay in obtaining a reimbursement decision from CMS in 2020.

In addition, license revenue also declined by EUR 103 thousand, or 75.2%, from EUR 137 thousand in the financial year 2019 to EUR 33 thousand in the financial year 2020, which represented 4.0% of our total revenue in the financial year 2020 (compared to 12.2% in the financial year 2019). In addition to the aforementioned effects associated with the COVID-19 pandemic, we terminated the exclusive license agreement with our former Chinese partner BioChain (the "**BioChain License Agreement**", see also *11.4.1. "Material Agreements — License Agreements — BioChain License Agreement"*) in October, 2019, thereby ending that revenue stream.

As a balancing effect, R&D revenue and reimbursements increased from EUR nil in 2019 to EUR 225 thousand in 2020 mainly resulting from an one-time effect due to R&D services rendered to a customer.

Broken down by region, revenue in North America decreased by EUR 183 thousand, or 25.6%, from EUR 714 thousand in the financial year 2019 to EUR 531 thousand in the financial year 2020, representing 63.1% of our total revenue in 2020 (compared to 63.4% in 2019) in line with the decline in revenue from product sales, as explained above.

In addition, revenue in Asia decreased by EUR 114 thousand, or 84.4%, from EUR 135 thousand in the financial year 2019 to EUR 21 thousand in 2020, representing 2.5% of our total revenue in the financial year 2020, compared to 12.0% in 2019 as a result of the termination of the BioChain License Agreement, as explained above.

In contrast, revenue in Europe increased by EUR 23 thousand, or 8.6%, from EUR 267 thousand in the financial year 2019 to EUR 290 thousand in the financial year 2020, representing 34.4% of our total revenue in 2020, compared to 23.8% in 2019. This increase was mainly due to the production of test kits for a third party in 2020.

7.5.1.3. Comparison of Revenue for the Financial Years 2019 and 2018

In 2019, total revenue decreased by EUR 408 thousand, or 26.6%, to EUR 1,125 thousand from EUR 1,533 thousand in 2018.

The major part of this decrease was attributable to revenue from license revenue which decreased by EUR 499 thousand, or 78.5%, from EUR 636 thousand in the financial year 2018 to EUR 137 thousand in the financial year 2019, representing 12.2% of our total revenue in the financial year 2019 (compared to 41.5% in 2018). Most of our license revenue was generated from our former Chinese partner BioChain, which we terminated in 2019 as detailed above. In addition, R&D revenue and reimbursements decreased to EUR nil thousand in the financial year 2019 from EUR 46 thousand in the financial year 2018, and other revenue also decreased to EUR nil thousand in the financial year 2019 from EUR 43 thousand in the financial year 2018, in each case, due to the lack of any service business in 2019.

In contrast, revenue from product sales (own and third-party) increased by EUR 180 thousand, or 22.3%, from EUR 808 thousand in the financial year 2018 to EUR 988 thousand in the financial year 2019, which represented 87.8% of our total revenue in the financial year 2019 (compared to 52.7% in the financial year 2018), in particular due to higher sales of Epi proColon in the United States which we achieved even when the issue of reimbursement for Epi proColon on the U.S. market remained unresolved in 2019. Product sales were the main contributor to overall revenue, with a large share generated by the business in the United States.

Broken down by region, revenue in Asia decreased by EUR 463 thousand, or 77.4%, from EUR 598 thousand in the financial year 2018 to EUR 135 thousand in 2019, representing 12.0% of our total revenue in the financial year 2019, compared to 39.0% in 2018. This decrease was mainly due to the termination of our cooperation with BioChain and the corresponding decline in license revenue in the region. In addition, revenue in Europe also decreased by EUR 29 thousand, or 9.8%, from EUR 296 thousand in the financial year 2018 to EUR 267 thousand in the financial year 2019, representing 23.8% of our total revenue in 2019, compared to 19.3% in 2018.

In contrast, revenue in North America increased by EUR 77 thousand, or 12.1%, from EUR 637 thousand in the financial year 2018 to EUR 714 thousand in the financial year 2019, representing 63.4% of our total revenue in 2019 (compared to 41.6% in 2018) as detailed above.

7.5.2. Cost of Sales

7.5.2.1. Comparison of Cost of Sales for the Six-Month Periods ended June 30, 2021 and 2020

Cost of sales decreased by EUR 22 thousand, or 31%, from EUR 71 thousand in the six-month period ended June 30, 2020 to EUR 49 thousand in the six-month period ended June 30, 2021. This decrease was principally due to a lower use of materials and consumables and a corresponding decrease in cost by EUR 15 thousand, or 23.4%, from EUR 64 thousand in the six-month period ended June 30, 2020 to EUR 49 thousand in the six-month period ended June 30, 2021. This decline resulted, in particular, from lower revenue from product sales in the six-month period ended June 30, 2021. In addition, personnel costs and other costs accounted for under cost of sales also declined in the six-month period ended June 30, 2021.

7.5.2.2. Comparison of Cost of Sales for the Financial Years 2020 and 2019

Cost of sales decreased by EUR 108 thousand, or 42.7%, from EUR 253 thousand in the financial year 2019 to EUR 145 thousand in the financial year 2020. This decrease was principally due to a lower use of materials and consumables and a corresponding decrease in cost by EUR 102 thousand, or 42.7%, from EUR 239 thousand in the financial year 2019 to EUR 137 thousand in the financial year 2020. This decline was driven, in particular, by lower revenue and, additionally, a higher share of R&D revenue in the financial year 2020 compared to the financial year 2019, which was associated with relatively lower cost of sales whereas revenue from product sales represented a lower share of overall revenue.

7.5.2.3. Comparison of Cost of Sales for the Financial Years 2019 and 2018

Cost of sales decreased by EUR 187 thousand, or 42.5%, from EUR 440 thousand in the financial year 2018 to EUR 253 thousand in the financial year 2019. This decrease was principally due to a lower use of materials and consumables and a corresponding decrease in cost by EUR 183 thousand, or 43.4%, from EUR 422 thousand in the financial year 2018 to EUR 239 thousand in the financial year 2019. In 2019, we sold fewer test kits to our largest customer than in 2018 but such test kits were sold at higher prices which resulted in a disproportionate decrease in costs for materials and consumables in relation to revenue.

7.5.3. Gross margin

7.5.3.1. Comparison of Gross margin for the Six-Month Periods ended June 30, 2021 and 2020

Our gross margin in the six-month period ended June 30, 2020 was 78.0% and remained stable at 78.0% in the six-month period ended June 30, 2021. A reduced share of license revenue and R&D revenue and reimbursements in the six-month period ended June 30, 2021 compared to the in the six-month period ended June 30, 2020 was counterbalanced by improved margins in revenue from product sales.

7.5.3.2. Comparison of Gross margin for the Financial Years 2020 and 2019

Given the development of our revenue and the abovementioned decline in cost of sales in particular, our gross margin increased to 82.8% in 2020 from 77.5% in the financial year 2019 due to, in particular, a higher share of R&D revenue in our overall revenue. This had a beneficial effect on our gross margin in 2020 compared to 2019 as detailed above.

7.5.3.3. Comparison of Gross margin for the Financial Years 2019 and 2018

Given the development of our revenue and the abovementioned decline in costs of sales in particular, our gross margin increased to 77.5% in 2019 from 71.3% in the financial year 2018 as we sold fewer test kits to our largest customer in 2019 than in 2018 but such test kits were sold at higher prices which resulted in a disproportionate decrease in costs for materials and consumables in relation to revenue. This had a beneficial effect on our gross margin in 2019 compared to 2018.

7.5.4. Other income

7.5.4.1. Comparison of Other income for the Six-Month Periods ended June 30, 2021 and 2020

Other income increased by EUR 798 thousand, or 104.5%, from EUR 764 thousand in the six-month period ended June 30, 2020 to EUR 1,562 thousand in the six-month period ended June 30, 2021. This increase was mainly related to an increase of income from foreign exchange rate gains resulting from the development of the U.S. dollar against the euro in the six-month period ended June 30, 2021.

7.5.4.2. Comparison of Other income for the Financial Years 2020 and 2019

Other income decreased by EUR 981 thousand, or 39.4%, from EUR 2,488 thousand in the financial year 2019 to EUR 1,507 thousand in the financial year 2020. This decrease was mainly related to a decrease of income from foreign exchange rate gains by EUR 829 thousand from EUR 2,187 thousand in the financial year 2019 to EUR 1,358 thousand in the financial year 2020, mainly as a result of the development of the euro against the U.S. dollar.

7.5.4.3. Comparison of Other income for the Financial Years 2019 and 2018

Other income increased by EUR 1,047 thousand, or 72.7%, from EUR 1,441 thousand in the financial year 2018 to EUR 2,488 thousand in the financial year 2019. This increase was mainly related to an increase of income from foreign exchange rate gains by EUR 1,483 thousand from EUR 704 thousand in the financial year 2018 to EUR 2,187 thousand in the financial year 2019, mainly as a result of the development of the U.S. dollar against the euro. A significant counter effect was caused by a decrease in income from the reversal of provisions by EUR 470 thousand, or 83.3%, from EUR 564 thousand in the financial year 2018 to EUR 94 thousand in the financial year 2019, because fewer previously issued phantom stock rights expired unexercised in 2019 compared to 2018.

7.5.5. R&D Costs

7.5.5.1. Comparison of R&D Costs for the Six-Month Periods ended June 30, 2021 and 2020

R&D costs decreased by EUR 1,209 thousand, or 43.9%, from EUR 2,754 thousand in the six-month period ended June 30, 2020 to EUR 1,545 thousand in the six-month period ended June 30, 2021. This decline was mainly due to the fact that the COVID-19 pandemic and associated containment measures had impacted almost all clinical trials in the United States, leaving them dormant or completely stopped (see also *7.5.5.2 "Comparison of R&D Costs for the Financial Years 2020 and 2019"*). Among others, this also affected our post-approval study for Epi proColon. R&D-related expenses for internal projects were also significantly reduced due to the continued short-time work (*Kurzarbeit*) at the Berlin site in the six-month period ended June 30, 2021. In comparison, the six-month period ended June 30, 2020, was only partially impacted by the effects of COVID-19.

7.5.5.2. Comparison of R&D Costs for the Financial Years 2020 and 2019

R&D costs decreased by EUR 3,681 thousand, or 50.2%, from EUR 7,340 thousand in the financial year 2019 to EUR 3,659 thousand in the financial year 2020. A large part of the decrease was attributable to the reduction of certain costs relating to studies underway that required cooperation with study sites providing us with samples. The COVID-19 pandemic and associated containment measures had a severe effect on our clinical studies in the United States and in some cases brought them to a complete standstill. Particularly hard hit was our post-approval study for Epi proColon following FDA product approval. In many cases patients were no longer included because they did not show up or the clinical test facilities had been closed for safety reasons. The laboratories also increasingly prioritized tests for COVID-19. In addition, use was made to the German short-time work (*Kurzarbeit*) scheme at our Berlin site, which affected our entire R&D team and contributed to the decline in R&D costs. During the first lockdown in particular, we also had to temporarily suspend laboratory operations.

7.5.5.3. Comparison of R&D Costs for the Financial Years 2019 and 2018

R&D costs increased by EUR 922 thousand, or 14.4%, from EUR 6,418 thousand in the financial year 2018 to EUR 7,340 thousand in the financial year 2019. A large part of the increase can be traced back to external costs that arose mainly in connection with carrying out medical studies. This primarily concerned a post-approval study for Epi proColon, which is required by the FDA in order to establish longitudinal clinical performance data for Epi proColon, as well as a cross-section study on liver cancer (HCC), both of which were conducted in the United States.

7.5.6. SG&A Costs

7.5.6.1. Comparison of SG&A Costs for the Six-Month Periods ended June 30, 2021 and 2020

SG&A costs decreased by EUR 880 thousand, or 22.6%, from EUR 3,901 thousand in the six-month period ended June 30, 2020 to EUR 3,021 thousand in the six-month period ended June 30, 2021. This decrease was mainly due to staff reductions in our U.S. sales force following the negative reimbursement decision for Epi proColon by CMS at the beginning of 2021. Additionally, short-time work (*Kurzarbeit*) for all employees at our Berlin site and in the administration department, which affected the entire six-month period ended June 30, 2021, but only parts of the six-month period ended June 30, 2020, also led to lower personnel costs.

7.5.6.2. Comparison of SG&A Costs for the Financial Years 2020 and 2019

SG&A costs decreased by EUR 1,634 thousand, or 18.3%, from EUR 8,935 thousand in the financial year 2019 to EUR 7,301 thousand in the financial year 2020. The decrease was primarily due to the decrease in personnel costs, as a result of the COVID-19 pandemic, forcing us to introduce short-time work (*Kurzarbeit*) for all employees at our Berlin site. In addition, limiting sales and marketing activities in the United States also contributed to the reduction of SG&A costs. For an extended period of time, our commercialization team was either unable to perform their normal tasks or faced severe restrictions in doing so. Travel was completely suspended and many specialist events such as trade fairs and conferences were either canceled or moved online, which resulted in notably lower expenses for delegates. Staff in the administration department were also subject to short-time work (*Kurzarbeit*) which led to lower personnel costs.

7.5.6.3. Comparison of SG&A Costs for the Financial Years 2019 and 2018

SG&A costs increased by EUR 232 thousand, or 2.7%, from EUR 8,703 thousand in the financial year 2018 to EUR 8,935 thousand in the financial year 2019. The increase was predominately due

to higher expenses for sales and marketing, in particular for consulting services. In addition, an increase in depreciation and amortization also contributed to the increase in SG&A costs in the financial year 2019 compared to the financial year 2018, which was essentially a result of the first-time application of IFRS 16 (Leases) and the corresponding depreciation of right-of use assets in the financial year 2019, see also *7.4. "Operating and Financial Review— Comparability of our Financial Statements as a Result of the Application of New and Revised IFRS"*. An opposite effect came from personnel costs, which were higher in the financial year 2018 than in the financial year 2019 due to a decline in share-based payment expenses in 2019.

7.5.7. Other Expenses

7.5.7.1. Comparison of Other Expenses for the Six-Month Periods ended June 30, 2021 and 2020

Other expenses decreased by EUR 26 thousand, or 3.8%, from EUR 681 thousand in the six-month period ended June 30, 2020 to EUR 655 thousand in the six-month period ended June 30, 2021, again due to foreign exchange rate losses caused by the development of the U.S. dollar against the euro.

7.5.7.2. Comparison of Other Expenses for the Financial Years 2020 and 2019

Other expenses increased by EUR 1,113 thousand, or 63.3%, from EUR 1,758 thousand in the financial year 2019 to EUR 2,871 thousand in the financial year 2020 and were again due to foreign exchange rate losses caused by the development of the U.S. dollar against the euro.

7.5.7.3. Comparison of Other Expenses for the Financial Years 2019 and 2018

Other expenses increased by EUR 1,450 thousand, or 470.8%, from EUR 308 thousand in the financial year 2018 to EUR 1,758 thousand in the financial year 2019. The reason for this increase were foreign exchange rate losses which increased by EUR 1,452 thousand in 2019 compared to 2018 due to the development of the U.S. dollar against the euro.

7.5.8. Operating Result/Earnings before Interest and Taxes (EBIT)

7.5.8.1. Comparison of EBIT for the Six-Month Periods ended June 30, 2021 and 2020

Our operating result/earnings before interest and taxes (EBIT) increased by EUR 2,836 thousand, or 44.9 %, from EUR (6,321) thousand in the six-month period ended June 30, 2020 to EUR (3,485) thousand in the six-month period ended June 30, 2021. The main reasons for this increase in the financial year 2020 were the abovementioned decreases in R&D costs and SG&A costs, as well as higher other income in the six-month period ended June 30, 2020 compared to the six-month period ended June 30, 2021, each as detailed above.

7.5.8.2. Comparison of EBIT for the Financial Years 2020 and 2019

Our operating result/earnings before interest and taxes (EBIT) increased by EUR 3,046 thousand, or 20.8%, from EUR (14,673) thousand in the financial year 2019 to EUR (11,627) thousand in the financial year 2020. The main reasons for this increase in the financial year 2020 were the abovementioned decreases in R&D costs and SG&A costs in the financial year 2020 which overcompensated the decrease in revenue and other income, each as detailed above.

7.5.8.3. Comparison of EBIT for the Financial Years 2019 and 2018

Our operating result/earnings before interest and taxes (EBIT) decreased by EUR 1,778 thousand, or 13.8%, from EUR (12,895) thousand in the financial year 2018 to EUR (14,673) thousand in the financial year 2019.

The main reasons for this decrease in the financial year 2019 were, besides the decrease of our revenue on the one hand, the increase of R&D costs and of SG&A costs in the financial year 2019 by EUR 922 thousand and EUR 232 thousand, in each case compared to the financial year 2018 and as further described above. In addition, the increased other expenses in 2019 also contributed to the decreased operating result/earnings before interest and taxes (EBIT). Certain balancing effects resulted from increased other income and, to a lesser degree, decreased cost of sales in the financial year 2019 compared to the in the financial year 2018, each as detailed above.

7.5.9. Total Financial Result

Our total financial result comprises interest and related income, other interest expenses and other finance costs, see also note 8 to the Audited Consolidated Financial Statements.

7.5.9.1. Comparison of the Total Financial Result for the Six-Month Periods ended June 30, 2021 and 2020

Total financial result decreased by EUR 17 thousand, or 89.5%, from EUR (19) thousand in the six-month period ended June 30, 2020 to EUR (36) thousand in the six-month period ended June 30, 2021. This decrease was mainly due to a decrease in interest on time deposits to EUR 3 thousand in the six-month period ended June 30, 2021, compared to EUR 12 thousand in the six-month period ended June 30, 2020. Also, our other financial result decreased from EUR (1) thousand in the six-month period ended June 30, 2020 to EUR (16) thousand in the six-month period ended June 30, 2021. As a balancing effect, our interest expenses from the compounding of long-term leases decreased from EUR 30 thousand in the six-month period ended June 30, 2020 to EUR 23 thousand in the six-month period ended June 30, 2021.

7.5.9.2. Comparison of the Total Financial Result for the Financial Years 2020 and 2019

Total financial result decreased by EUR 143 thousand from EUR 107 thousand in 2019 to EUR (36) thousand in the financial year 2020. This decrease was mainly due to a decrease in interest on time deposits to EUR 3 thousand in the financial year 2020, compared to EUR 154 thousand in the financial year 2019 since we had benefited from higher average liquidity and a temporary slight increase in the U.S. dollar interest rate in 2019. Moreover, our interest expenses from the compounding of long-term leases decreased only slightly from EUR 63 thousand in the financial year 2019 to EUR 55 thousand in the financial year 2020, leading to a negative financial result in 2020.

7.5.9.3. Comparison of the Total Financial Result for the Financial Years 2019 and 2018

Total financial result increased by EUR 642 thousand from EUR (535) thousand in 2018 to EUR 107 thousand in the financial year 2019. This increase was mainly due to significantly reduced interest expenses by EUR 487 thousand from EUR 550 thousand in 2018 to EUR 63 thousand in 2019 since we repaid a convertible at the end of 2018, which accounted for our interest expenses in that year. An increase in interest received on time deposits to EUR 172 thousand in the financial year 2019, with no such income in the financial year 2018, also had a beneficial effect our total financial result. A limited opposing effect resulted from the compounding of long-term leases following the first-time application of IFRS 16 (Leases) in the financial year 2019, see also *7.4. "— Comparability of our Financial Statements as a Result of the Application of New and Revised IFRS"*.

7.5.10. Taxes on Income

7.5.10.1. Comparison of Taxes on Income for the Six-Month Periods ended June 30, 2021 and 2020

Tax expenses, which were already on a lower level of EUR 14 thousand in the six-month period ended June 30, 2020, decreased by EUR 7 thousand, or 50%, to EUR 7 thousand in the six-month period ended June 30, 2021.

7.5.10.2. Comparison of Taxes on Income for the Financial Years 2020 and 2019

Tax expenses of EUR 23 thousand in the financial year 2020 resulted from local taxes at the U.S. subsidiary. The prior-year figure of EUR 2,454 thousand was extraordinarily impacted by a non-recurring effect of writing off deferred tax assets that had been recognized in the past in respect of our tax loss carryforwards in the United States (see *7.5.10.3. "— Comparison of Taxes on Income for the Financial Years 2019 and 2018"* below).

7.5.10.3. Comparison of Taxes on Income for the Financial Years 2019 and 2018

Tax expenses of EUR 2,454 thousand in the financial year 2019 (2018: income tax of EUR 738 thousand) resulted essentially from writing off deferred tax assets that had been recognized in the past in respect of the tax loss carryforwards of the U.S. subsidiary. This took into consideration the liquidity situation as of December 31, 2019, which would not have allowed for the continuation of business activities beyond the end of 2020. Without further cash inflows, the utilization of these loss carryforwards by the subsidiary, which is also burdened with a history of losses, would have been considered highly unlikely at that time, see also *7.3.5. "Operating and Financial Review — Key Factors Affecting Results of Operations, Financial Position and Cash Flows — Deferred Taxes"*.

7.5.11. Net Loss for the Period/Earnings per Share

7.5.11.1. Comparison of Net Loss for the Period/Earnings per Share for the Six-Month Periods ended June 30, 2021 and 2020

Net loss for the period decreased by EUR 2,826 thousand, or 44.5%, from EUR 6,354 thousand in the six-month period ended June 30, 2020 to EUR 3,528 thousand in the six-month period ended June 30, 2021, mainly due to the abovementioned decrease in taxes on income and increase of our operating result/earnings before interest and taxes (EBIT), all compared to the six-month period ended June 30, 2020 and as described above.

The loss per share (basic and diluted) decreased to EUR 0.41 in the six-month period ended June 30, 2021, from EUR 1.21 (restated) in the six-month period ended June 30, 2020 whereby the figure for the six-month period ended June 30, 2020 was restated to account for the consolidation of shares resolved by Company's general shareholders' meeting in November 2020 (see *15.1. "Information on the Share Capital of Epigenomics AG and Applicable Regulations — Current Share Capital and Shares"*).

7.5.11.2. Comparison of Net Loss for the Year/Earnings per Share for the Financial Years 2020 and 2019

Net loss for the year decreased by EUR 5,335 thousand, or 31.3%, from EUR 17,020 thousand in 2019 to EUR 11,686 thousand in the financial year 2020, mainly due to the abovementioned decrease in taxes on income and increase of our operating result/earnings before interest and taxes (EBIT), all compared to the financial year 2019 and as described above.

The loss per share (basic and diluted) decreased to EUR 2.02 in 2020, from EUR 3.65 (restated) in 2019 whereby the 2019 figure was restated to account for the consolidation of shares resolved by Company's general shareholders' meeting in November 2020 (see *15.1. "Information on the Share Capital of Epigenomics AG and Applicable Regulations — Current Share Capital and Shares"*).

7.5.11.3. Comparison of Net Loss for the Year/Earnings per Share for the Financial Years 2019 and 2018

Net loss for the year increased by EUR 4,328 thousand, or 34.1%, from EUR 12,692 thousand in 2018 to EUR 17,020 thousand in the financial year 2019, mainly due to the abovementioned decrease in taxes on income and our operating result/earnings before interest and taxes (EBIT) in spite of an improved total financial result, all compared to the financial year 2018 and as described above.

The loss per share (basic and diluted) decreased slightly to EUR 0.46 in 2019, from EUR 0.47 in 2018. This was mainly due to the increased average number of issued Shares in the financial year 2019, compared to the financial year 2018, which more than compensated for the increase in our net loss in the financial year 2019.

7.6. Statement of Financial Position

The following table presents the consolidated balance sheet as of June 2021 and December 31, 2020, 2019 and 2018:

	As of June 30,	As of December 31,		
	2021	2020	2019	2018
(EUR thousand)	**(unaudited)**	**(audited)**		
Intangible assets	69	144	333	474
Property, plant and equipment	959	1,184	1,533	701
Deferred taxes	—	—	0	2,378
Total non-current assets	**1,028**	**1,328**	**1,866**	**3,553**
Inventories	242	122	313	364
Trade receivables	78	251	89	164
Marketable securities	0	961	880	653
Cash and cash equivalents	6,949	3,566	10,155	16,487
Other current assets	1,393	569	686	606
Total current assets	**8,662**	**5,469**	**12,123**	**18,274**
Total assets	**9,690**	**6,797**	**13,989**	**21,827**
Subscribed capital	11,823	5,891	43,528	36,022
Capital reserve	88,102	87,419	69,251	68,802
Retained earnings	(90,732)	(79,046)	(85,807)	(73,115)
Net loss for the period	(3,528)	(11,686)	(17,020)	(12,692)
Other comprehensive income	696	1,286	(323)	(404)
Total equity	**6,361**	**3,864**	**9,629**	**18,613**
Lease liabilities[1]	416	460	697	—
Provisions	36	36	44	47
Total non-current liabilities	**452**	**496**	**741**	**47**
Trade payables	828	629	1,430	1,411
Lease liabilities[1]	161	223	216	—
Deferred income	95	80	5	23
Other liabilities	1,321	627	1,368	771

	As of June 30,	As of December 31,		
	2021	2020	2019	2018
(EUR thousand)	(unaudited)		(audited)	
Provisions	472	878	600	962
Total current liabilities	**2,877**	**2,437**	**3,619**	**3,167**
Total equity and liabilities	**9,690**	**6,797**	**13,989**	**21,827**

[1] Named liabilities from leasing contracts in the Audited Consolidated Financial Statements.

7.6.1. Non-Current Assets

7.6.1.1. Comparison of Non-Current Assets as of June 30, 2021 and December 31, 2020

As of June 30, 2021, our total non-current assets amounted to EUR 1,028 thousand, representing 10.7% of our total assets, compared to EUR 1,328 thousand as of December 31, 2020, representing 19.5% of our total assets. Non-current assets comprised intangible assets, representing 6.7% (June 30, 2021) and 10.8% (December 31, 2020) of our total non-current assets, and property, plant and equipment, representing 93.3% (June 30, 2021) and 89.2% (December 31, 2020) of our total non-current assets. Deferred taxes amounted to nil (June 30, 2021 and December 31, 2020).

Non-current assets decreased from EUR 1,328 thousand as of December 31, 2020 to EUR 1,028 thousand as of June 30, 2021. This was due to amortization and impairment which caused property, plant and equipment, as well as intangible assets to decline accordingly.

7.6.1.2. Comparison of Non-Current Assets as of December 31, 2020 and 2019

As of December 31, 2020, our total non-current assets amounted to EUR 1,328 thousand, representing 19.5% of our total assets, compared to EUR 1,866 thousand as of December 31, 2019, representing 13.3% of our total assets. Non-current assets comprised intangible assets, representing 10.8% (December 31, 2020) and 17.8% (December 31, 2019) of our total non-current assets, property, plant and equipment, representing 89% (December 31, 2020) and 82.2% (December 31, 2019) of our total non-current assets and deferred taxes, representing 0% (December 31, 2020) and 0% (December 31, 2019) of our total non-current assets.

Non-current assets decreased from EUR 1,866 thousand as of December 31, 2019 to EUR 1,328 thousand as of December 31, 2020. This was in part due to the decline in patent licenses from EUR 1,021 thousand in 2019 to zero in 2020 as our last in-licensing agreements have expired in 2020. In addition, amortization and impairment caused intangible assets to decline from EUR 333 thousand as of December 31, 2019 to EUR 145 thousand as of December 31, 2020.

7.6.1.3. Comparison of Non-Current Assets as of December 31, 2019 and 2018

As of December 31, 2019, our total non-current assets amounted to EUR 1,866 thousand, representing 13.3% of our total assets, compared to EUR 3,553 thousand as of December 31, 2018, representing 16.3% of our total assets. Non-current assets comprised intangible assets, representing 17.8% (December 31, 2019) and 13.3% (December 31, 2018) of our total non-current assets, property, plant and equipment, representing 82.2% (December 31, 2019) and 19.7% (December 31, 2018) of our total non-current assets and deferred taxes, representing 0% (December 31, 2019) and 66.9% (December 31, 2018) of our total non-current assets.

Non-current assets decreased from EUR 3,553 thousand as of December 31, 2018 to EUR 1,866 thousand as of December 31, 2019. As the main effect, deferred tax assets previously recognized (December 31, 2018: EUR 2,378 thousand) were written off in full in 2019, see also *7.3.5. "Operating and Financial Review — Key Factors Affecting Results of Operations, Financial*

Position and Cash Flows — Deferred Taxes". In addition, amortization and impairment caused intangible assets to decline from EUR 474 thousand as of December 31, 2018 to EUR 333 thousand as of December 31, 2019. In contrast, property, plant and equipment grew by EUR 832 thousand in 2019 as a result of long-term leases being recognized in non-current assets due to the first-time application of IFRS 16 (Leases), see also *7.4. "Operating and Financial Review— Comparability of our Financial Statements as a Result of the Application of New and Revised IFRS"*.

7.6.2. Current Assets

7.6.2.1. Comparison of Current Assets as of June 30, 2021 and December 31, 2020

As of June 30, 2021, our total current assets amounted to EUR 8,662 thousand, representing 89.4% of our total assets, compared to EUR 5,469 thousand, representing 80.5% of our total assets as of December 31, 2020. Current assets comprised cash and cash equivalents, representing 80.2% (June 30, 2021) and 65.2% (December 31, 2020) of our total current assets, marketable securities, representing 0.0% (June 30, 2021) and 17.6% (December 31, 2020) of our total current assets, inventories, representing 2.8% (June 30, 2021) and 2.2% (December 31, 2020) of our total current assets, trade receivables, representing 0.9% (June 30, 2021) and 4.6% (December 31, 2020) of our total current assets, and other current assets, representing 16.1% (June 30, 2021) and 10.4% (December 31, 2020) of our total current assets.

Current assets increased from EUR 5,469 thousand at the start of 2021 to EUR 8,662 thousand as of June 30, 2021. The main driver for this development was the increase in liquidity by EUR 2,422 thousand in the first half of 2021 (cash and cash equivalents increased by EUR 3,383 thousand, see also *7.7.1. "Operating and Financial Review — Cash Flows"* whereas marketable securities decreased by EUR 961 thousand as the securities position previously held was completely liquidated in the first half of 2021) resulting from the issuance of the Mandatory Convertible Bonds 2021/2024 issued on February 1, 2021 and the capital increases by way of private placement implemented in May 2021. In addition, other current assets increased from EUR 569 thousand as of December 31, 2020 to EUR 1,393 thousand from to June 30, 2021, mainly due to the recognition of payment obligations for the issue of the New Bonds. In contrast, trade receivables decreased by EUR 173 thousand from December 31, 2020 to June 30, 2021.

7.6.2.2. Comparison of Current Assets as of December 31, 2020 and 2019

As of December 31, 2020, our total current assets amounted to EUR 5,469 thousand, representing 80.5% of our total assets, compared to EUR 12,123 thousand as of December 31, 2019, representing 86.7% of our total assets. Current assets comprised cash and cash equivalents, representing 65.2% (December 31, 2020) and 83.8% (December 31, 2019) of our total current assets, marketable securities, representing 17.6% (December 31, 2020) and 7.3% (December 31, 2019) of our total current assets, inventories, representing 2.2% (December 31, 2020) and 2.6% (December 31, 2019) of our total current assets, trade receivables, representing 4.6% (December 31, 2020) and 0.7% (December 31, 2019) of our total current assets, and other current assets, representing 10.4% (December 31, 2020) and 5.7% (December 31, 2019) of our total current assets.

Current assets decreased from EUR 12,123 thousand at the start of 2020 to EUR 5,469 thousand as of December 31, 2020. The main driver for this development was the decline in liquidity by EUR 6,589 thousand in 2020 (cash and cash equivalents decreased by EUR 6,589 thousand, see also *7.7.1. "Operating and Financial Review — Cash Flows"* whereas marketable securities increased by EUR 81 thousand in 2020). In addition, trade receivables increased by EUR 162 thousand from December 31, 2019 to December 31, 2020 due to the fact that many of them had not yet fallen due. A decline in inventories by EUR 191 thousand which was mainly reflective of a lower

sales forecast at the balance sheet date also contributed to the decline of our current assets in 2020. Other current assets also decreased slightly from EUR 686 thousand to EUR 569 thousand from December 31, 2019 to December 31, 2020.

7.6.2.3. Comparison of Current Assets as of December 31, 2019 and 2018

As of December 31, 2019, our total current assets amounted to EUR 12,123 thousand, representing 86.7% of our total assets, compared to EUR 18,274 thousand as of December 31, 2018, representing 83.7% of our total assets. Current assets comprised cash and cash equivalents, representing 83.8% (December 31, 2019) and 90.2% (December 31, 2018) of our total current assets, marketable securities, representing 7.3% (December 31, 2019) and 3.6% (December 31, 2018) of our total current assets, inventories, representing 2.6% (December 31, 2019) and 2.0% (December 31, 2018) of our total current assets, trade receivables, representing 0.7% (December 31, 2019) and 0.9% (December 31, 2018) of our total current assets, and other current assets, representing 5.7% (December 31, 2019) and 3.3% (December 31, 2018) of our total current assets.

Current assets decreased from EUR 18,274 thousand at the start of 2019 to EUR 12,123 thousand as of December 31, 2019. A major reason was the decline in liquidity by EUR 6,105 thousand in 2019 (cash and cash equivalents decreased by EUR 6,332 thousand, see also *7.7.1. "Operating and Financial Review — Cash Flows"*, whereas marketable securities increased by EUR 227 thousand in 2019). Trade receivables also decreased by EUR 75 thousand from December 31, 2018 to December 31, 2019 due to a balance sheet date effect. A decline in inventories by EUR 51 thousand mainly reflective of a lower sales forecast at the balance sheet date also contributed to the decline of our current assets in 2019. In contrast, other current assets increased from EUR 606 thousand to EUR 686 thousand from December 31, 2018 to December 31, 2019 due to balance sheet date effect.

7.6.3. Equity

7.6.3.1. Comparison of Equity as of June 30, 2021 and December 31, 2020

As of June 30, 2021, the Company's total equity amounted to EUR 6,361 thousand, compared to EUR 3.864 thousand as of December 31, 2020. This was a result of our increased subscribed capital which amounted to EUR 11,823 thousand as of June 30, 2021 compared to EUR 5,891 thousand as of December 31, 2020. In the first conversion window for the Mandatory Convertible Bonds 2021/2024 during the first 14 days of April 2021, Mandatory Convertible Bonds 2021/2024 in a nominal amount of EUR 4,357,606.00 were converted into 3,961,460 Shares, increasing the subscribed capital of the Company accordingly (see also *15.1. "Information on the Share Capital of Epigenomics AG and Applicable Regulations — Current Share Capital and Shares"*). Additionally, net loss for the period reduced from EUR (11,686) thousand as of December 31, 2020 to EUR (3,528) thousand as of June 30, 2021. The main balancing effect related to an increase in accumulated net losses was accounted for under retained earnings, which increased from EUR (79,046) thousand as of December 31, 2020 to EUR (90,732) thousand as of June 30, 2021.

7.6.3.2. Comparison of Equity as of December 31, 2020 and 2019

As of December 31, 2020, the Company's total equity amounted to EUR 3.864 thousand, compared to EUR 9,629 thousand as of December 31, 2019. The net loss for the year of EUR 11,686 thousand in 2020 was only partly offset by the capital increase implemented in April 2020 (see *15.1. "Information on the Share Capital of Epigenomics AG and Applicable Regulations — Current Share Capital and Shares"*). In November of 2020, the general shareholders' meeting convened to report a loss amounting to half of the equity reported in the annual financial of the German parent

company (prepared in accordance with the provisions of the German Commercial Code (*Handelsgesetzbuch*)) pursuant to Section 92 para. 1 Stock Corporation Act (*Aktiengesetz*) resolved, among other things, a capital reduction by means of a consolidation of shares in a ratio of eight to one. For this reason our subscribed capital declined from EUR 43.5 million as of December 31, 2019 to EUR 5.9 million as of December 31, 2020. As well as partly reducing accumulated net losses accounted for under retained earnings, which decreased from EUR (85,807) thousand as of December 31, 2019 to EUR (79,046) thousand as of December 31, 2020, this move also strengthened the capital reserves and was the main reason for the increase of those capital reserves to EUR 87,419 thousand as of December 31, 2020 from EUR 69,251 thousand as of December 31, 2019.

7.6.3.3. Comparison of Equity as of December 31, 2019 and 2018

As of December 31, 2019, the Company's total equity amounted to EUR 9,629 thousand, compared to EUR 18,613 thousand as of December 31, 2018.

The decrease of our equity in 2019 was mainly a result of the decrease of retained earnings from EUR (73,115) thousand as of December 31, 2018 to EUR (85,807) thousand as of December 31, 2019 reflective of the net loss for the year 2018.

In addition, our net loss for the year amounted to EUR 17,020 thousand as of December 31, 2019 compared to EUR 12,692 thousand as of December 31, 2018 as detailed above. This negative effect was only partly offset by a capital increase implemented in November 2019, as a result of which the subscribed capital was increased from EUR 36,022 thousand as of December 31, 2018, to EUR 43,528 thousand as of December 31, 2019. As another balancing effect, our capital reserve increased from EUR 68,802 thousand as of December 31, 2018, to EUR 69,251 thousand as of December 31, 2019. Thereof, an increase of EUR 826 thousand was attributable to the aforementioned capital increase. At the same time, however, the capital reserve was reduced by EUR 1,250 thousand through costs in connection with this transaction. Another EUR 873 thousand increase of our capital reserve during the course of the financial year 2019 was attributable to the issuance of stock options to Executive Board and staff members, see also note 21 to the consolidated balance sheet of the Audited Consolidated Financial Statements 2019.

7.6.4. Non-Current Liabilities

7.6.4.1. Comparison of Non-Current Liabilities as of June 30, 2021 and December 31, 2020

As of June 30, 2021, our total non-current liabilities amounted to EUR 452 thousand compared to EUR 496 thousand as of December 31, 2020. The decrease of non-current liabilities by EUR 44 thousand related to a decrease in lease liabilities and resulted mainly from the monthly utilization of the capitalized lease, whereas (non-current) provisions remained stable at EUR 36 thousand.

7.6.4.2. Comparison of Non-Current Liabilities as of December 31, 2020 and 2019

As of December 31, 2020, our total non-current liabilities amounted to EUR 469 thousand compared to EUR 741 thousand as of December 31, 2019. The decrease of non-current liabilities by EUR 272 thousand related to both a decrease in lease liabilities, as well as provisions and resulted mainly from the monthly utilization of the capitalized lease.

7.6.4.3. Comparison of Non-Current Liabilities as of December 31, 2019 and 2018

As of December 31, 2019, our total non-current liabilities amounted to EUR 741 thousand compared to EUR 47 thousand as of December 31, 2018. The increase of non-current liabilities by EUR 694 thousand related to the recognition of non-current lease liabilities due to the first-time application of

IFRS 16 (Leases) in 2019 and which included liabilities from rental and leasing agreements and amounted to EUR 697 thousand as of December 31, 2019, see also *7.4. "— Comparability of our Financial Statements as a Result of the Application of New and Revised IFRS"*.

7.6.5. Current Liabilities

7.6.5.1. Comparison of Current Liabilities as of June 30, 2021 and December 31, 2020

As of June 30, 2021, our total current liabilities amounted to EUR 2,877 thousand compared to EUR 2,437 thousand as of December 31, 2020.

As the main effect, other liabilities increased from EUR 627 thousand as of December 31, 2020 to EUR 1,321 thousand as of June 30, 2021 mainly due to the recognition of payment obligations for the issue of the New Bonds. In addition, trade payables increased from EUR 629 thousand as of December 31, 2020 to EUR 828 thousand as of June 30, 2021, due to rising advisory fees in connection with capital measures implemented in the six-month period ended June 30, 2021. As the main balancing effect, current provisions decreased from EUR 878 thousand as of December 31, 2020 to EUR 472 thousand as of June 30, 2021, mainly due to a reduction in payroll provisions upon utilization. Lease liabilities also decreased to EUR 161 thousand as of June 30, 2021, from EUR 223 thousand as of December 31, 2020 reflective of the remaining term of our lease contracts.

7.6.5.2. Comparison of Current Liabilities as of December 31, 2020 and 2019

As of December 31, 2020, our total current liabilities amounted to EUR 2,437 thousand compared to EUR 3,619 thousand as of December 31, 2019.

As the main effect, other liabilities decreased from EUR 1,368 thousand as of December 31, 2019 to EUR 627 thousand as of December 31, 2020 due mainly to lower personnel claims recorded under payables due to staff. Trade payables decreased from EUR 1,430 thousand as of December 31, 2019 to EUR 629 thousand as of December 31, 2020, due to effects relating to the reporting date. Lease liabilities almost remained at the 2019 levels, increasing to EUR 223 thousand as of December 31, 2020, from EUR 216 thousand as of December 31, 2019. Current provisions also slightly increased from EUR 600 thousand as of December 31, 2019 to EUR 878 thousand as of December 31, 2020.

7.6.5.3. Comparison of Current Liabilities as of December 31, 2019 and 2018

As of December 31, 2019, our total current liabilities amounted to EUR 3,619 thousand compared to EUR 3,167 thousand as of December 31, 2018.

As the main effect, other liabilities increased from EUR 771 thousand (December 31, 2018) to EUR 1,368 thousand (December 31, 2019) due mainly to the higher personnel claims recorded under payables due to staff. In addition, lease liabilities increased to EUR 216 thousand as of December 31, 2019, compared to EUR nil as of December 31, 2018, due to the aforementioned first-time application of IFRS 16 (Leases). Trade payables almost remained at the 2018 levels increasing to EUR 1,430 thousand as of December 31, 2019 from EUR 1,411 thousand as of December 31, 2018. As the main partial balancing effect, current provisions decreased from EUR 963 thousand as of December 31, 2018 to EUR 600 thousand as of December 31, 2019. There was a significant reduction in payroll provisions upon utilization in 2019, more than offsetting certain additions to the other provisions for various uncertain operating obligations in connection with clinical studies, as well as certain IP and regulatory proceedings.

7.7. Liquidity and Capital Resources

Since inception, we have incurred significant operating losses. In particular, for the six-month period ended June 30, 2021 we incurred a net loss for the period of EUR 3,528 thousand for that six-month period. For the financial years 2020, 2019 and 2018, we incurred a net loss for the year of EUR 11,685 thousand, EUR 17,020 thousand and EUR 12,692 thousand, respectively. We have funded our operations since the initial public offering of Shares in the Prime Standard segment of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) in Germany in 2004 primarily through private and public offerings of equity securities and convertible notes, grant revenues and revenues from our operating activities (*i.e.*, product sales, sale of intangible assets, licensing income, as well as R&D income and reimbursements).

For more information on our cash and funding sources see *7.7.5. "Operating and Financial Review — Cash and Funding Sources"*.

Our cash and cash equivalents are deposited primarily in savings and deposit accounts with original maturities of three months or less. As of June 30, 2021, an amount of EUR 83 thousand of bank deposits was restricted cash.

7.7.1. Cash Flows

The following table sets forth the consolidated statement of cash flows for the six-month periods ended June 30, 2021 and 2020, as well as the financial years 2020, 2019 and 2018:

	Six-Month Period ended June 30,		Financial Year		
	2021	2020	2020	2019	2018
(EUR thousand)	**(unaudited)**		**(audited)**		
Cash and cash equivalents at the beginning of the period	**3,566**	**10,155**	**10,155**	**16,487**	**12,826**
Operating activities:					
Net loss for the period	(3,528)	(6,354)	(11,686)	(17,020)	(12,692)
Adjustments for:					
Share-based payment expenses	9	389	631	873	1,151
Amortization of intangible asset	75	99	342	319	196
Depreciation of property, plant and equipment	236	175	193	194	112
Losses from the disposal of non-current assets	—	—	0	1	0
Foreign currency exchange results	(391)	0	0	25	(4)
Financial income	(26)	(12)	(21)	(172)	(18)
Financial expenses	62	31	56	65	552
Taxes	7	14	23	2,454	(738)
Operating result before changes in operating assets and liabilities	**(3,556)**	**(5,658)**	**(10,462)**	**(13,261)**	**(11,441)**
Changes in operating assets and liabilities:					
Inventories	(119)	73	185	45	(66)
Trade receivables	170	36	(159)	84	782
Other assets	(823)	212	108	(77)	1,297
Non-current and current provisions	(409)	349	286	(364)	(147)
Trade payables and other liabilities	506	(629)	420	118	(776)
Deferred income	15	115	74	(17)	23

	Six-Month Period ended June 30,		Financial Year		
	2021	2020	2020	2019	2018
(EUR thousand)	(unaudited)		(audited)		
Taxes paid	(7)	(14)	(23)	(34)	(23)
Cash flow from operating activities	**(4,223)**	**(5,516)**	**(9,571)**	**(13,506)**	**(10,351)**
Investing activities:					
Payments to acquire intangible assets	0	(11)	(11)	(47)	(15)
Payments to acquire property, plant and equipment	(1)	(7)	(10)	(75)	(91)
Payments related to capitalized development costs	—	—	—	0	0
Proceeds from investment grants received	—	—	—	0	813
Proceeds from the sales of securities	984	—	—	—	—
Interest received	10	24	24	169	17
Cash flow from investing activities	**993**	**6**	**3**	**47**	**724**
Financing activities:					
Proceeds from the issue of new shares	2,168	3,998	3,998	8,332	21,253
Payments for the issue of new shares	(54)	(726)	(725)	(983)	(1,958)
Payments for reduction in capital	—	—	(23)	—	—
Proceeds from the issue of convertible bonds	5,500	—	—	0	0
Payments for the issue of convertible bonds	(969)	—	—	0	(1)
Payments for the redemption of convertible notes	—	—	—	0	(6,020)
Payments from leasing contracts	(131)	(123)	(268)	(229)	0
Cash flow from financing activities	**6,514**	**3,149**	**2,982**	**7,120**	**13,274**
Net cash flow	**3,284**	**(2,361)**	**(6,586)**	**(6,339)**	**3,647**
Currency translation effects	99	15	(3)	7	14
Cash and cash equivalents at the end of the year	**6,949**	**7,809**	**3,566**	**10,155**	**16,487**

7.7.2. Cash Flow from Operating Activities

7.7.2.1. Comparison of Cash Flow from Operating Activities for the Six-Month Periods ended June 30, 2021 and 2020

In the six-month period ended June 30, 2021, cash flow from operating activities increased by EUR 1,293 thousand, or 23.4%, to EUR (4,223) thousand from EUR (5,516) thousand in the six-month period ended June 30, 2020. This was mainly caused by the decrease in net loss for the period which improved from EUR (6,354) thousand in the six-month period ended June 30, 2020 to EUR (3,528) thousand in as of June 30, 2021. A balancing effect resulted from working capital effects.

7.7.2.2. Comparison of Cash Flow from Operating Activities for the Financial Years 2020 and 2019

In 2020, cash flow from operating activities increased by EUR 3,935 thousand, or 29%, to EUR (9,571) thousand from EUR (13,506) thousand in 2019. This was mainly caused by the decrease in net loss from EUR 17,020 thousand in 2019 to EUR 11,686 thousand in 2020. A limited balancing effect resulted from working capital effects.

7.7.2.3. Comparison of Cash Flow from Operating Activities for the Financial Years 2019 and 2018

In 2019, cash flow from operating activities decreased by EUR 3,155 thousand, or 30.5%, to EUR (13,506) thousand from EUR (10,351) thousand in 2018. This decrease was partly due to the increased net loss for the year, which, in combination with certain adjustments, as set out in the table above, in particular relating to taxes, financial expenses and stock option expenses, resulted in an impact on cash flow from operating activities by the operating result before changes in operating assets and liabilities of EUR (13,261) thousand in 2019, compared to EUR (11,441) thousand in 2018. In addition, changes in operating assets and liabilities also had a negative effect on our cash flow from operating activities in 2019, mainly reflective of the changes in other assets and trade receivables, in contrast to the small positive effect therefrom in 2018.

7.7.3. Cash Flow from Investing Activities

7.7.3.1. Comparison of Cash Flow from Investing Activities for the Six-Month Periods ended June 30, 2021 and 2020

In the six-month period ended June 30, 2021, cash flow from investing activities increased by EUR 987 thousand from EUR 6 thousand in the six-month period ended June 30, 2020 to EUR 993 thousand. The increase in cash flow from investing activities was mainly a result of the increase in payment from the sale of securities of EUR 984 thousand which related to the liquidation of a previously held position in marketable securities in the six-month period ended June 30, 2021 with no such cash inflow in the six-month period ended June 30, 2020.

7.7.3.2. Comparison of Cash Flow from Investing Activities for the Financial Years 2020 and 2019

In 2020, cash flow from investing activities decreased by EUR 44 thousand, or 93.6%, from EUR 47 thousand in 2019 to EUR 3 thousand. The main investing activities in 2020 were payments to acquire property, plant and equipment and totaled EUR (10) thousand, compared to EUR (75) thousand in 2019 and payments to acquire intangible assets, which totaled EUR (11) thousand, compared to EUR (47) thousand in 2019. The decrease in cash flow from investing activities was mainly a result of the decrease in interest received from EUR 169 thousand in the financial year 2019 to EUR 24 thousand in the financial year 2020 as interest rates on deposits in U.S. dollar were lower.

7.7.3.3. Comparison of Cash Flow from Investing Activities for the Financial Years 2019 and 2018

In 2019, cash flow from investing activities decreased by EUR 677 thousand, or 93.5%, from EUR 724 thousand in 2018 to EUR 47 thousand. The main investing activities in 2019 were payments to acquire property, plant and equipment and totaled EUR (75) thousand, compared to EUR (91) thousand in 2018. The decrease in cash flow from investing activities was mainly a result of a decrease of proceeds from investment grants received which impacted the cash flow from investing activities in 2018 by EUR 813 thousand and were obtained from a project funded by the

EU, whereas, in 2019, cash proceeds from investment grants received amounted to EUR nil thousand. Interest payments of EUR 169 thousand (predominately on time deposits by investing free liquidity) were received in 2019, compared to EUR 17 thousand in 2018.

7.7.4. Cash Flow from Financing Activities

7.7.4.1. Comparison of Cash Flow from Financing Activities for the Six-Month Periods ended June 30, 2021 and 2020

In the six-month period ended June 30, 2021, cash flow from financing activities increased by EUR 3,365 thousand from EUR 3,149 thousand in the six-month period ended June 30, 2020 to EUR 6,514 thousand.

This increase was principally a result of the proceeds from the issuance of the Mandatory Convertible Bonds 2021/2024 in an aggregate principal amount of EUR 5,500 thousand in the six-month period 2021 accounted for under payments from the issue of convertible bonds. This increase was partially offset by payments for the issuance of convertible bonds, which increased by EUR 969 thousand, and lower proceeds from the issue of new shares which decreased by EUR 1,830 thousand, each in the six-month period ended June 30, 2021 compared to the six-month period ended June 30, 2020, in line with the capital measures implemented in the respective periods (see *7.7.5.1. "— Cash and Funding Sources — Equity Contributions"*).

7.7.4.2. Comparison of Cash Flow from Financing Activities for the Financial Years 2020 and 2019

In 2020, cash flow from financing activities decreased by EUR 4,138 thousand, or 58%, from EUR 7,120 thousand in 2019 to EUR 2,982 thousand. This decrease was principally due to lesser proceeds from equity measures. Gross proceeds from the issue of new shares in the financial year 2020 of EUR 3,998 thousand (2019: EUR 8,332 thousand) related to the Company's capital increase from authorized capital in 2020. Cash outflows from financing activities in 2020 amounted to EUR 748 thousand (2019: EUR 983 thousand) and related to the aforementioned capital increase and partly to the capital increase in late 2019. In addition, payments from leasing contracts increased to EUR (268) thousand in 2020, compared to EUR (229) thousand in the 2019.

7.7.4.3. Comparison of Cash Flow from Financing Activities for the Financial Years 2019 and 2018

In 2019, cash flow from financing activities decreased by EUR 6,154 thousand, or 46.4%, from EUR 13,274 thousand in 2018 to EUR 7,120 thousand. This decrease was principally due to lesser proceeds from equity measures as our capital increase in November 2019 generated proceeds from the issue of new shares of EUR 8,332 thousand whereas the prior capital increase in October 2018 achieved proceeds of EUR 21,253 thousand. In contrast, the negative impact of payments for the redemption of conversion of convertible notes of EUR 6,020 thousand in 2018 (see also, note 27 to the balance sheet of the Audited Consolidated Financial Statements 2018) was not repeated in 2019. In addition, payments from leasing contracts amounted to EUR (229) thousand in 2019, compared to nil in the 2018. This effect was due to the abovementioned first-time application of IFRS 16 (Leases), see also *7.4. "Operating and Financial Review— Comparability of our Financial Statements as a Result of the Application of New and Revised IFRS"*.

7.7.5. Cash and Funding Sources

Our cash and cash equivalents as of June 30, 2021 amounted to EUR 6,949 thousand. As of December 31, 2020, 2019 and 2018, our cash and cash equivalents amounted to EUR 3,566 thousand, EUR 10,155 thousand and EUR 16,487 thousand, respectively. In addition, we held

marketable securities in the form of so-called “Trust-preferred Securities” issued by a wholly owned subsidiary of Deutsche Bank AG of EUR 961 thousand, EUR 880 thousand and EUR 653 thousand as of December 31, 2020, 2019 and 2018, respectively. This securities position was completely liquidated in the first half of 2021.

7.7.5.1. Equity Contributions

In the six-month period ended June 30, 2021, financial years 2020, 2019 and 2018, equity contributions of our shareholders constituted our main funding source. The following presents a summary of the equity measures implemented during that period. Prospective investors should note that on November 27, 2020 the extraordinary general shareholders’ meeting of the Company resolved on the reduction of the share capital by way of an ordinary capital reduction by consolidation of the shares for the purpose of covering losses and allocation to the capital reserves of the Company, see also *15.1.1. “Information on the Share Capital of Epigenomics AG and Applicable Regulations — Current Share Capital and Shares — Foundation and Capital Measures”*.

7.7.5.1.1. Share Capital Increase 2021

In 2021, the Company executed a capital increase with subscription rights of existing shareholders against contributions in cash by use of the authorized capital 2020/II in order to acquire further liquidity to finance its current business operations by a private placement of 1,970,537 new shares of the Company. The new shares were issued at an issue price of EUR 1.10 per share. The capital increase was registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Charlottenburg on May 19, 2021, and resulted in gross proceeds to us of EUR 2,167 thousand. As a result, the Company’s share capital was increased from EUR 9,852,690.00 by EUR 1,970,537.00 to EUR 11,823,227.00, and the resulting shares were admitted to trading on the sub-segment of the regulated market (*regulierter Markt*) with additional post-admission obligations (Prime Standard) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*).

7.7.5.1.2. Issuance of Mandatory Convertible Bonds 2021/2024

On January 7, 2021, the Executive Board, with consent of the Supervisory Board, resolved to issue the Mandatory Convertible Bonds 2021/2024 in an aggregate principal amount of EUR 5,500 thousand, making use of the Authorization 2020/II (as defined below). During the subscription period for existing shareholders in January 2021, subscription rights and oversubscription rights were exercised for the full aggregate nominal amount of offered Mandatory Convertible Bonds 2021/2024. Accordingly, on February 1, 2021, Mandatory Convertible Bonds 2021/2024 in an aggregate amount of EUR 5,500 thousand were issued resulting in gross proceeds to us of EUR 5,500 thousand.

7.7.5.1.3. Share Capital Increase 2020

In 2020, the Company executed a capital increase with subscription rights of existing shareholders against contributions in cash by use of the authorized capital 2019/I in order to acquire further liquidity to finance its current business operations by a private placement of 3,602,154 new shares of the Company. The new shares were issued at an issue price of EUR 1.11 per share. The capital increase was registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Charlottenburg on April 2, 2020, and resulted in gross proceeds to us of EUR 4,000 thousand. As a result, the Company’s share capital was increased from EUR 43,527,692.00 by EUR 3,602,154.00 to EUR 47,129,846.00, and the resulting shares were admitted to trading on the sub-segment of the regulated market (*regulierter Markt*) with additional post-admission obligations (Prime Standard) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*).

7.7.5.1.4. Share Capital Increase 2019

In 2019, the Company executed a capital increase with subscription rights of existing shareholders against contributions in cash by use of the authorized capital 2019/II in order to acquire further liquidity to finance its current business operations by a private placement of 7,506,152 new shares of the Company. The new shares were issued at an issue price of EUR 1.11 per share. The capital increase was registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Charlottenburg on November 8, 2019, and resulted in gross proceeds to us of EUR 8,332 thousand. As a result, the Company's share capital was increased from EUR 36,021,540.00 by EUR 7,506,152.00 to EUR 43,527,692.00, and the resulting shares were admitted to trading on the sub-segment of the regulated market with additional post-admission obligations (Prime Standard) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*).

7.7.5.1.5. Share Capital Increase 2018

In 2018, the Company executed a capital increase with subscription rights of existing shareholders against contributions in cash and partially in kind by use of with the authorized capital 2018/I and the authorized capital 2018/II in order to acquire further liquidity to finance its current business operations and to reduce the Company's outstanding financial debt. A total of 12,007,180 shares were newly issued at an issue price of EUR 1.86 per share. The capital increase was registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Charlottenburg on October 24, 2018, and resulted in gross proceeds to us of EUR 22,333 thousand. As a result, the Company's share capital was increased from EUR 24,014,360.00 by EUR 12,007,180.00 to EUR 36,021,540.00, and the resulting shares were admitted to trading on the sub-segment of the regulated market with additional post-admission obligations (Prime Standard) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*).

For additional information, see also *15.1.1. "Information on the Share Capital of Epigenomics AG and Applicable Regulations — Current Share Capital and Shares — Foundation and Capital Measures".*

7.7.5.2. Research Grant from the European Union from its Horizon 2020 Framework Program

In May 2015, we were awarded a research grant by the European Union for our project "Validation of a Lung Cancer Plasma Reflex Test Using Epigenetic Biomarker for Cancer Detection (proLungPlasma)" (Grant agreement number 672680). Under the terms of the award, we were initially granted EUR 970 thousand in 2015 (of which EUR 97 thousand were held retained) and further received EUR 816 thousand in 2016 and EUR 813 thousand in 2018. The project has been successfully terminated and finalized in March 2018.

7.7.5.3. Research Grant from the European Union "Colossus"

In November 2017, we and 13 other partners/beneficiaries were awarded a research grant by the European Union for the project "Advancing a Precision Medicine Paradigm in metastatic Colorectal Cancer: Systems based patient stratification solutions' — 'COLOSSUS' ('action')" (Grant agreement number 754923). Under the terms of the award, we were initially granted a prepayment of EUR 81 thousand in 2018. We may further receive up to EUR 150 thousand for research work on this project in the course of the project. The project has a term of 60 months from the starting date January 1, 2018.

7.7.6. Other Financial Obligations

Our other financial obligations as of June 30, 2021, amounted to EUR 146 thousand. As of December 31, 2020, amounted to EUR 940 thousand, compared to EUR 701 thousand as of December 31, 2019 and EUR 1,825 thousand as of December 31, 2018.

The following table sets forth our other financial obligations as of June 30, 2021, December 31, 2020, 2019 and 2018, grouped according to the period in which payments are due:

	As of June 30, 2021		As of December 31,					
			2020		2019		2018	
	(unaudited)		(audited)					
(EUR thousand)	term < 1 year	term 1-5 years	term < 1 year	term 1-5 years	term < 1 year	term 1-5 years	term < 1 year	term 1-5 years
Financial obligations from rental agreements	—	—	—	—	—	—	317	31
Financial obligations from licensing agreements	0	0	—	—	32	0	47	0
Financial obligations from operating rental, lease maintenance and service agreements	20	0	29	23	23	9	22	0
Financial obligations from manufacturing orders	68	0	354	0	149	0	467	0
Financial obligations from the purchase of goods and services	58	0	507	27	476	12	940	1
Total financial obligations	146	0	**890**	**50**	**680**	**21**	**1,793**	**32**

7.7.7. Investments

7.7.7.1. Overview

We define investments as capital expenditures. Capital expenditures include additions to technical/laboratory equipment, leasehold improvements, office equipment, IT equipment, software and development costs (if capitalized in accordance with IAS 38), as applicable in each financial year.

The main sources of funding for our historic and ongoing capital expenditures have been, and continue to be, private and public offerings of equity securities and convertible notes, grant revenues and revenues from our operating activities (*i.e.*, product sales, sale of intangible assets, licensing income, as well as R&D income and reimbursements).

The following table shows our capital expenditures in the six-month periods ended June 30, 2021 and 2020, as well as financial years 2020, 2019 and 2018:

	Six-Month Period ended June 30,		Financial Year		
	2021	2020	2020	2019	2018
(EUR thousand)	**(unaudited)**		**(unaudited)**		
Technical/laboratory equipment	0	0	1	51	73
Office equipment.....	2	0	0	8	0
IT equipment.....	3	7	9	11	17
Software.....	0	0	5	52	16
Total capital expenditures	**5**	**7**	**15**	**122**	**106**

7.7.7.2. Ongoing and Future Investments

We do not have any material ongoing investments.

As of the date of the Prospectus, we also do not plan to make any material investments other than our usual replacement and maintenance investments. These investments are not expected to exceed a five-digit amount in Euros in the next twelve months.

7.7.7.3. Major Investments in the Six-Month Periods ended June 30, 2021, as well as in the Financial Years 2020, 2019 and 2018.

In in six-month period ended June 30, 2021, our total capital expenditures amounted to EUR 5 thousand as we had no major investments during that period. Our total capital expenditures decreased from EUR 122 thousand in 2019 to EUR 15 thousand in the financial year 2020. While in the financial year 2020 and the six-month period ended June 30, 2021, no major investments have been made, major investments in the financial year 2019 were an update of our ERP system (EUR 50 thousand) and a liquid handling platform system for our lab in Berlin (EUR 31 thousand). In the financial year 2018, our total capital expenditures were at EUR 106 thousand, mostly reflecting investments in technical lab equipment and replacement purchases related to IT equipment.

7.8. Disclosures about Market Risks

Our activities expose us to a variety of risks, including liquidity risk, foreign currency exchange risk, credit risk, and interest rate risk. These risks are described in, and should be read in conjunction with, our risk management see pages F-30 to F-32 (notes 34 to 38 of the Audited Consolidated Financial Statements 2020) and *1.5. "Risk Factors — Financial Risks"*.

7.9. Critical Judgments and Accounting Estimates

Our management has made, and will continue to make, several judgments in the process of applying the Group's accounting policies that have a significant effect on the amounts recognized in the financial statements. Those judgments concern, among others, the capitalization of development costs and the recognition of deferred taxes. Furthermore, in the case of several items, assumptions or estimates are required to be made that affect the carrying amounts in the consolidated balance sheet and/or the amounts recognized in the consolidated statement of profit or loss and comprehensive income. This also applies to the presentation of contingent assets and liabilities. The actual amounts may vary from these assumptions and estimates.

In particular, determining the useful life of capitalized development costs of our products requires a long-term estimation of several factors, including, *inter alia,* the market approval timelines for

products, their market acceptance and/or the speed of their market penetration, regulatory developments in key markets, the timing and the extent of reimbursement decisions, and competition. Particularly for novel products like blood-based cancer tests there are no empirical values and less experience available which makes any estimations difficult. Our management closely observes developments on the key markets and regularly reviews its own projections. Reaching or not reaching a milestone, such as a market approval division, will therefore lead to remeasurements which may possibly be decisive for a change of the previously expected useful lives.

Further details on management's judgments, assumptions and expectations are described in the notes to our Audited Consolidated Financial Statements 2020, in particular in the section entitled "Management's Judgment, Assumptions and Expectations", see pages F-10 *et seqq*.

7.10. Additional Information Relating to the German GAAP (German Generally Accepted Accounting Principles) Audited Unconsolidated Financial Statements of the Company for the Financial Year 2020

The Audited Unconsolidated Financial Statements 2020 have been prepared in accordance with the provisions of the German Commercial Code (*Handelsgesetzbuch*) in conjunction with the supplementary rules of the German Stock Corporation Act (*Aktiengesetz*).

In 2020, the Company recorded total revenue of EUR 1,036 thousand, compared to EUR 1,523 thousand in 2019. In 2020, the net loss for the year amounted to EUR 19,987 thousand, compared to a net loss for the year of EUR 9,702 thousand in 2019.

As of December 31, 2020, the total assets of the Company amounted to EUR 11,201 thousand, compared to EUR 28,088 thousand as of December 31, 2019. Total equity amounted to EUR 9,554 thousand as of December 31, 2020, compared to EUR 25,543 thousand as of December 31, 2019. Total liabilities amounted to EUR 1,647 thousand as of December 31, 2020, compared to EUR 2,545 thousand as of December 31, 2019.

8. PROFIT FORECAST

8.1. Revenue and EBITDA Before Share-Based Payment Expenses Forecast for the Financial Year 2021

As the following forecast is prepared on the basis of assumptions about future events and actions, it naturally entails substantial uncertainties. Because of these uncertainties, it is possible that the actual revenue and/or EBITDA before share-based payment expenses of the Group may differ materially from the forecasted numbers. The forecast expressed in this section relates to revenue, as well as EBITDA before share-based payment expenses (EBITDA before share-based payment expenses means total comprehensive income for the year before other comprehensive income for the year, taxes on income, other financial result, interest expenses, interest income, depreciation and amortization further adjusted for the line item share-based payment expenses) of the Group and is not a statement about facts and should not be interpreted as such. Rather, it is a statement about the current expectations of the Company's management in respect of the revenue and EBITDA before share-based payment expenses of the Group for the financial year 2021. In this context, the Company considers EBITDA before share-based payment expenses to be an indicative equivalent for its operating result.

The forecast is based on the assumptions set out below made by the Executive Board for the development of the influencing factors of the revenue and the EBITDA before share-based payment expenses of the Group. The assumptions used in this forecast relate to factors which (i) cannot be influenced by the Group and those which (ii) can, even if only to a limited extent, be influenced by the Group. Even if the Company believes that these assumptions are reasonable at the time of the estimate of revenue and EBITDA before share-based payment expenses by the Company's management, they may prove erroneous or unfounded and, in particular to the extent related to future business decisions, are subject to change. If one or more of these assumption(s) prove(s) to be erroneous or unfounded, the actual result could deviate materially from the forecast regarding revenue and the EBITDA before share-based payment expenses, as well as the Groups' revenue and EBITDA before share-based payment expenses prediction for the financial year 2020.

The forecast regarding revenue and the EBITDA before share-based payment expenses is based on the factors and assumptions made by the Executive Board with respect to the development of factors influencing revenue and the EBITDA before share-based payment expenses for the financial year 2021 as set out below under *8.2.1. "— Explanatory Notes to the Revenue and EBITDA Before Share-Based Payment Expenses Forecast — Factors Which Cannot Be Influenced by the Group and Related Assumptions"* and *8.2.2. "— Explanatory Notes to the Revenue and EBITDA Before Share-Based Payment Expenses Forecast — Factors Which Can Be Influenced by the Group and Related Assumptions"*.

Based on these factors, assumptions and associated uncertainties, we expect that revenue for the financial year 2021 will be approximately EUR 6.0 million. Derived therefrom, we expect that EBITDA before share-based payment expenses for the financial year 2021 will be in a range between EUR (3.0) million and EUR (4.0) million.

8.2. Explanatory Notes to the Revenue and EBITDA Before Share-Based Payment Expenses Forecast

8.2.1. Factors Which Cannot Be Influenced by the Group and Related Assumptions

The revenue and EBITDA before share-based payment expenses forecast for the financial year 2021 is subject to factors beyond our control. These factors and our assumptions taken about their impact are described below.

Factor 1: Unforeseen Events Such as Force Majeure

For the purpose of this revenue and EBITDA before share-based payment expenses forecast, we have assumed that no material unforeseen events will occur that could result in material or lasting constraints on the ongoing operations of the Group, such as *force majeure* (*e.g.*, material macroeconomic events, war, terrorist attacks or a further pandemic).

Factor 2: COVID-19

For the purpose of this revenue and EBITDA before share-based payment expenses forecast, we have assumed that COVID-19 and associated containment measures, in particular in the United States, will continue to have negative effects on our business operations at least for a substantial part of the financial year 2021 even though we expect these effects to recede in the course of the financial year 2021. In particular, certain of our clinical studies in the United States were brought to a complete standstill and cancer screenings in the United States declined noticeably in the financial year 2020, and we expect these conditions will continue at least for a substantial part of the financial year 2021. Other COVID-19 effects on our business included an overall reduced productivity, including of our R&D activities, resulting from remote working arrangements and limited resources due to, for example, short-time work (*Kurzarbeit*) at our Berlin site all of which we expect to continue at least for a substantial part of the financial year 2021.

Factor 3: Political, Legislative and other Regulatory Measures

Our business operations and particularly our in vitro tests are subject to a number of different legal and other regulatory requirements, both on a national and international level, that may be influenced by political measures or events. In particular, in the United States, our tests are regulated by the FDA as medical devices under the Federal Food, Drug, and Cosmetic Act.

For the purpose of this revenue and EBITDA before share-based payment expenses forecast, we have assumed that there will be a stable political environment and have assumed no material changes in the legal and regulatory framework or regulatory actions which the Group is or may become subject to. In particular, we have assumed, in accordance with the principles of prudence, that no U.S. legislation mandating Medicare coverage for Epi proColon will come into effect within the financial year 2021 irrespective of our expectation on the actual likelihood.

Factor 4: Foreign Currency Rates

Product revenue in the United States, our key market, is generated in U.S. dollars while our reporting currency is the Euro. Thus, the foreign exchange rate between these two currencies influences our revenue.

This revenue and EBITDA before share-based payment expenses forecast is based on an anticipated foreign exchange rate of the euro against the U.S. dollar of 1.20.

8.2.2. Factors Which Can Be Influenced by the Group and Related Assumptions

In addition to the factors and assumptions that are beyond our control, the revenue and EBITDA before share-based payment expenses forecast for the financial year 2021 is subject to factors that can be, even if only to a limited extent, be influenced by us. These factors and our assumptions taken about their impact are described below.

Factor 1: Overturning the negative NCD

In particular, our revenue projections have their primary focus on the commercialization of Epi proColon in the United States, which continues to be limited due to the negative reimbursement decision by CMS. In accordance with the principles of prudence, we based this revenue and EBITDA before share-based payment expenses forecast on the assumption, that we will not achieve Medicare coverage for Epi proColon in the financial year 2021 by overturning the negative national coverage decision by CMS irrespective of our expectation on the actual likelihood. Because only an aggrieved party can appeal the decision that is then decided by the competent U.S. Department of Health and Human Services' Departmental Appeals Board ("**DAB**") and possibly subsequently reviewed by a court, we have only limited influence on the timing and the outcome of any such processes.

Factor 2: SG&A Costs

Our EBITDA before share-based payment expenses is depending on, among other things, the development of our SG&A Costs. For the purpose of this revenue and EBITDA before share-based payment expenses forecast, we have assumed our SG&A Costs for the financial year 2021 to be substantially lower than our SG&A Costs for the financial year 2020. Our cost structure is dominated by personnel costs, as well as legal and IP costs and costs for services and consulting. In the financial year 2021, we do not plan to extent or intensify our operations, but try to minimize our cash consumption. In addition, we do not expect any extraordinary expenses for the remainder of the financial year 2021.

In line with our assumption of only limited commercialization in the United States, we do not plan to expand our headcount in the financial year 2021. In addition, we expect short-time work (*Kurzarbeit*) at our Berlin site, as well as the waiver of part of the compensation of the Executive Board and the Supervisory Board to continue throughout the financial year 2021. Compared to the financial year 2020, for the purpose of this revenue and EBITDA before share-based payment expenses forecast, we have assumed personnel costs, in particular, related to reduced sales and marketing activities in the United States, in the financial year 2021 to be substantially lower, because though the aforementioned measures also existed in the financial year 2020, they were only implemented during the course of the financial year 2020 (*i.e.*, only *pro rata temporis* reducing personnel costs in 2020).

Factor 3: R&D Costs

For the purpose of this revenue and EBITDA before share-based payment expenses forecast, we have assumed slightly lower R&D costs in the financial year 2021, compared to the financial year 2020, particularly due to lower personnel costs relating to R&D, in particular, because we have assumed that Jorge Garces, Ph.D., who had been our Chief Scientific Officer on the Executive Board and who resigned from this position effective as of January 31, 2021, will not be replaced for the time being.

Our R&D costs strongly relate to studies and clinical trials that require cooperation with hospitals providing us with samples. In the financial year 2020, COVID-19 and associated containment measures had a severe effect on our clinical studies in the United States and in some cases brought

them to a complete standstill. Particularly hard hit was our post-approval study for Epi proColon following FDA product approval. In many cases, patients were no longer included because they did not show up or the clinical test facilities had been closed for safety reasons. The laboratories also increasingly prioritized tests for the virus in the financial year 2020. While we expect these effects to recede in the course of the financial year 2021 (see above *"Factor 2: COVID-19"* under *8.2.1. "— Factors Which Cannot Be Influenced by the Group and Related Assumptions"*), we expect only limited activities in this area in the financial year 2021.

Factor 4: No Material Change of Our Operational Strategy

For the purpose of this revenue and EBITDA before share-based payment expenses forecast, we have assumed that there will be no effect on our operational strategy as currently in place as a result of a potential implementation of any of the alternative strategic options currently explored and evaluated, or otherwise, but we have assumed that we will continue our business strategy as hitherto in the financial year 2021.

8.2.3. Principles

The revenue and EBITDA before share-based payment expenses forecast for the financial year 2021 has been compiled and prepared on a basis which is both: (i) comparable with the historical financial information of the Group and (ii) consistent with the Group's accounting policies.

Additionally, it was prepared in accordance with the principles of the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer*, IDW) Accounting Practice Statement: Preparation of Profit Estimates and Estimates in accordance with the Special Requirements of the Regulation on Prospectuses IDWAcPS AAB 2.003 (IDW RH HFA 2.003). With respect to the accounting policies applied, reference is made to the notes of the Audited Consolidated Financial Statements 2020 included in the section *20. "Financial Information"* of the Prospectus beginning on page F-1.

Although not being an IFRS measurement of operating income, operating performance or liquidity, the EBITDA before share-based payment expenses profit forecast for the financial year 2021 was derived using accounting principles of the International Financial Reporting Standards as adopted by the European Union (IFRS).

This revenue and EBITDA before share-based payment expenses forecast for the financial year 2021 was prepared on August 17, 2021 and remains valid as of the date of the Prospectus.

9. MARKETS AND COMPETITIVE ENVIRONMENT

The statements on markets and competition provided below are based on the cited third-party sources and on our internal market observations and estimates – some of which are, in turn, derived from various sources we believe to be reliable. Such sources include industry publications, as well as surveys, data and studies published by third parties. These sources may not fully reflect the potential impact of the ongoing global COVID-19 pandemic and potential future waves of infections. In view of the potential effects of this pandemic on the economy, society and markets in which we operate, all current forecasts can be made only with a high degree of uncertainty. We did not verify or modify any of the market data provided by third-party providers. For more information on the sources used, see *2.4. "General Information — Information from Third Parties*".

Due to the lack of comparable publicly available information in certain areas and due to differing methodologies, market definitions and modeling, the data on market sizes, projected growth rates and competitive position should be viewed with caution as they may be different from other publications of the used sources or similar analyses by other market research companies or competitors. Market sizes, market positions and market shares mentioned in the Prospectus may not be fully comparable with other information mentioned in the Prospectus. Additional factors which should be considered in assessing the market and competitive data and, in particular, the projected growth rates, are described elsewhere in the Prospectus, including those set out in the sections entitled *1. "Risk Factors"*, *2.3. "General Information — Forward-Looking Statements"* and *7.3. "Operating and Financial Review — Key Factors Affecting Results of Operations, Financial Position and Cash Flows"*.

9.1. IVD and Molecular IVD

The healthcare industry has seen changes and challenges in the past and is expected to see them in the future. According to the Deloitte 2021 Global Health Care Outlook, health care demand and expenditures continue to increase due to aging and growing populations, greater prevalence of chronic diseases, economic recovery, and exponential advances in innovative, but costly, digital technologies.

As part of the healthcare industry, the life sciences industry is closely tied to this development. In this environment we consider ourselves to be active within the IVD subsegment of the medtech segment, as defined for example by the Deloitte 2020 Sector Outlook. The IVD subsegment is the largest medtech subsegment globally, accounting for a market share of 12.9% in 2018 and it is expected to remain the largest medtech subsegment for the foreseeable future (source: Deloitte 2020 Sector Outlook). The BIS Research Forecast values the global in-vitro diagnostic market at USD 69.51 billion in 2020 and predicts the global IVD subsegment to reach a value of USD 113.86 billion by 2030, growing at a CAGR of 5.06% from 2020 to 2030. The IVD Market Research Report forecasts the global market size for IVD to reach USD 96 billion by 2025.

More particularly, we are active in the molecular IVD area of the IVD subsegment, because our key commercial product, Epi proColon, as well as other products, such as HCCBloodTest, and certain product candidates are IVD tools that use molecular diagnostic techniques. The global molecular IVD area was valued at approximately USD 8.76 billion in 2019 (source: Kalorama Report). According to the same source, the molecular IVD area is expected to reach a value of approximately USD 9.03 billion in 2024 (excluding COVID-19 tests), with the major part of this growth expected in the fields of infectious diseases, cancer, and transplant diagnostics. Allied Market Research estimates the global molecular diagnostics market at approximately USD 17.8 billion in 2021 and predicts it to grow to approximately USD 31.8 billion by 2026 at a CAGR of 12.3% during the period

from 2021 to 2026, due to the increasing prevalence of infectious diseases and cancer, the rising funding for R&D, the increase in point-of-care testing devices and technological advancements. Deviating therefrom, Grand View Research 2021 values the global molecular diagnostics market at USD 43.9 billion in 2021, which constitutes a significant increase from approximately USD 10.1 billion in 2020 (source: Grand View Research 2020), and anticipates a rise to USD 49.3 billion by 2028 at an anticipated CAGR of 3.9% from 2021 to 2028. However, much on this extraordinary growth is likely to be attributed to effects from the COVID-19 pandemic which cause an unprecedented rise in demand for COVID-19 testing capacities that we do not serve with our products.

Throughout the healthcare industry including the IVD subsegment and particularly the molecular IVD area thereof, regulation and reimbursement are vital success factors for companies active in the field of developing and commercializing novel diagnostic tools and methods. We believe, it will remain a challenge to adequately address these factors in different markets, given the fragmented nature of the regulatory and reimbursement landscapes. While we believe the U.S. is still the most attractive single market from an economic perspective, China is increasingly catching up in terms of public health policy, technology development, maturity of the capital markets, entrepreneurial spirit and increasing income among its population.

9.2. Molecular Diagnostics and Cancer

According to BCC Research, the global market for liquid biopsy is expected to grow from USD 2.4 billion in 2018 to USD 6.1 billion by 2023, corresponding to a CAGR of 20.8% over the period of 2018 to 2023. For cancer specifically, BCC Research expected the global liquid biopsy market to grow at a CAGR of 41.7% from approximately USD 0.4 billion in 2018 to USD 2.4 billion in 2023.

9.2.1. The Colorectal Cancer Testing Market

According to the ACS Cancer Facts and Figures 2021, colorectal cancer is one of the most common types of cancer worldwide (see *9.3. "— Cancer Diagnostics Markets by Geography"*), leading to significant demand for clinical and diagnostic products in this area. Given that colorectal cancer typically develops slowly over long periods of time, screening for the disease has proven to be effective in reducing mortality rates (source: ACS Colorectal Cancer Facts and Figures 2020-2022). However, current screening methods suffer from high non-adherence rates, meaning that large numbers of patients do not undergo testing despite official recommendations that they do so (source: ACS Colorectal Cancer Facts and Figures 2020-2022). As a result, we believe that screening methods which can increase adherence rates and are cost-effective have the potential to gain wide acceptance in the medical community.

Treatment of early-stage colorectal cancer is relatively successful (source: ACS Colorectal Cancer Facts and Figures 2020-2022), and therefore, the benefits to be obtained from screening for early-stage colorectal cancers are considerable. According to our estimates, screening among those in the familial or genetically predisposed risk groups has been fairly adequate; however, we estimate that screening programs for average-risk individuals have consistently been below desired levels.

CRC screening has historically been performed using one of two testing methods: visualization-based or stool-based methods (source: Information on CRC Screening). The key limitations of visualization-based testing, such as colonoscopy and colonography (a radiological imaging approach which visualizes the inside of the bowel by use of spiral computerized axial tomography known as a CT scan), are either the invasiveness of the method, the required colon preparation which the patient usually performs the day prior to testing at home and/or the high procedure cost (source: Information on CRC Screening). Existing and possibly improved traditional screening tests

including stool-based testing, such as fecal occult blood tests, fecal immunochemical tests or stool DNA tests, while less invasive, typically rely on patients to collect a stool sample in their homes and then return the sample to a clinical laboratory. Possibly as a result of the inconvenience associated with this type of testing, the rate of adherence is a challenge, *i.e.*, many patients do not follow through and complete the test regularly (source: ACS Colorectal Cancer Facts and Figures 2020-2022).

We believe some of the benefits of blood-based tests, such as our key product, Epi proColon, are that they do not require any preparation and can be performed through a routine blood draw as part of a routine medical visit. Once the medical professional draws the patient's blood, the patient is free to return to his or her daily routine and simply wait for the test results. For this reason, we believe Epi proColon (as to our knowledge it is currently the only FDA-approved blood-based screening product for the early detection of colorectal cancer) is indicated for use in screening average-risk adults who have a history of non-adherence to colorectal cancer screening guidelines. In August 2020, the Cancer Intervention and Surveillance Modelling Network ("**CISNET**") published results of a microsimulation model comparing the incremental cost-effectiveness of alternative screening methods to colonoscopy and fecal immunochemical tests, which recommended Epi proColon for annual screening of individuals not willing to use other forms of testing.

9.2.2. Liver Cancer Diagnostics Market

Liver cancer was the third most common cause of cancer death worldwide in 2020, and about 905,700 new cases (number five among all cancers) were diagnosed that year according to Globocan 2020 (see also *9.3. "— Cancer Diagnostics Markets by Geography"*). We believe there is a clinical need for improved diagnostic testing for liver cancer as despite major progress in imaging methods such as ultrasound, the reliable diagnosis of liver cancer remains a significant medical challenge. As the signs and symptoms of HCC, which is the most common of form primary liver cancers (source: mSEPT9 Research Paper), usually first become apparent at advanced stages of the disease, it is important for high risk individuals, particularly patients with cirrhosis, to undergo regular surveillance (source: HCC Early-Stage Management). This is relevant, in particular, as the detection of HCC at an early stage improves survival and allows the use of potentially curative treatments in light of generally very poor prognosis for liver cancer (*e.g.*, ACS Liver Cancer Information expects 30,230 deaths will be caused by liver cancer in 2021 in the U.S. compared to 42,230 new cases that are expected to be diagnosed in the same year in the U.S.). According to a study published in 2017, worldwide, approximately 80% of HCC cases are caused by hepatitis B virus and/or hepatitis C virus infection, especially in the setting of established cirrhosis or advanced fibrosis (source: Asia-Pacific 2017 Update). Alcoholic liver disease and non-alcoholic fatty liver disease are also important risk factors for HCC, but the single largest risk factor for development of HCC is cirrhosis of any etiology, which is present in 70 to 90% of those adults who have primary liver cancer (source: Asia-Pacific 2017 Update).

Therefore, in many countries patients suffering from chronic liver disease are subject to what we believe to be continuous diagnostic monitoring. Based on an estimate of 50 million people worldwide suffering from chronic liver disease (according to the WGO Study), and assuming 10% of the affected population is under surveillance twice per year, we estimate that the global market for liver cancer surveillance among patients with cirrhosis is likely to cover more than 10 million tests annually. Currently, we estimate that the favored surveillance approach to detect early-stage HCC includes ultrasound and measurement of the serum biomarker alpha-fetoprotein ("**AFP**"), a widely used diagnostic marker for liver cancer in cirrhosis patients. However, it is also considered insufficiently sensitive or specific for use in a screening assay and suboptimal for routine clinical practice: Research has suggested that our HCCBloodTest has a higher degree of diagnostic accuracy than AFP (source: mSEPT9 Research Paper).

We believe that a blood test designed specifically for cirrhosis patients with higher diagnostic accuracy compared to AFP could provide both medical and economic value to patients, physicians and payors in the healthcare system by accelerating follow-up or clinical intervention, which might improve the HCC survival rate and reduce the need for costly treatments at advanced stages. Specifically, we expect such blood tests, such as our HCCBloodTest, to address the liver cancer diagnostic market related to therapy management for severe illnesses, rather than that related to general screening. Furthermore, liver cancer surveillance is, according to our assessment, generally carried out in fewer but specialized liver centers allowing for focused distribution efforts and marketing activities. We believe that by offering a future version of our HCCBloodTest we can increase diagnostic accuracy compared to AFP in detecting HCC among patients with cirrhosis based on the data collected by the mSEPT9 Research Paper, which we believe to be confirmed by an upcoming next generation sequencing ("**NGS**") liver cancer publication.

9.2.3. The Lung Cancer Testing Market

Lung cancer exhibits higher prevalence rates in key markets worldwide than CRC (see *9.3. "— Cancer Diagnostics Markets by Geography").* Despite the high prevalence rates globally, we believe very few industrialized countries utilize a screening program. Lung cancer screening produces high false positive rates, meaning that large numbers of patients are recommended for more invasive and costly secondary screening even though they do not have lung cancer (source: NCI Lung Screenings). For instance, a national lung screening trial performed in over 50,000 current or former heavy smokers aged 55 to 74 in the United States demonstrated an estimated false positive rate of 96.4% (source: NCI Lung Screenings, last updated in 2014) for patients screened by means of a low dose computed tomography ("**LDCT**") scan and a false positive rate of 94.5% for chest x-ray exams (source: NCI Lung Screenings), meaning that 96.4% and 94.5%, respectively, of screening results indicating cancer are incorrect. We believe a highly accurate blood-based test could help determine which of these positively tested patients require additional diagnostic follow-up and possibly treatment, thus providing both medical and economic value to patients, physicians and payors in the healthcare system by reducing the number of patients undergoing more invasive follow-up diagnostics based on false-positive initial screening results.

Our product for lung cancer detection, Epi proLung, is a blood-based non-invasive test used to assist in the determination on additional follow-up procedures such as a biopsy. A future version of our test could potentially also be used to monitor the recurrence of lung cancer and to monitor lung cancer patients' response to chemotherapy. However, as of the date of the Prospectus, we are not actively pursuing further development of the test or its commercialization.

9.3. Cancer Diagnostics Markets by Geography

According to Grand View Research 2021 (which splits the global molecular diagnostics market into North America, Europe, Asia-Pacific, Latin America, as well as Middle East and Africa) North America held the highest market share of the global molecular diagnostics market with about 36% in 2020, a decrease from almost 45% in 2019 (source: Grand View Research 2020) whereby much of this regional shift is likely to be attributed to effects from the COVID-19 pandemic. This is in particular due to factors such as the prevalence of infectious diseases and cancers in the region, the presence of a highly developed healthcare system including laboratories, easy accessibility to technologically advanced instruments, availability of government funds, and growing applications of molecular diagnostics in genetic disorders and cancer screening (source: Allied Market Research). North America is also predicted to remain the biggest market in 2027 (source: Grand View Research 2021). However, Grand View Research 2021 predicts the fastest growth for molecular diagnostics from 2021 to 2028 in the Asia-Pacific region.

9.3.1. The Cancer Diagnostics Market in the United States

Due to its size, what we consider a well-developed healthcare system and its role in cancer research, we consider the United States the most attractive single market for our products and current product candidates. This view accords with that of market researchers, such as Grand View Research 2020, which considers North America the industry leader and largest revenue generating region for molecular diagnostics in 2020.

CRC is the third leading cause of cancer-related deaths in men and women in the United States (source: ACS Colorectal Cancer Statistics). According to the ACS Colorectal Cancer Statistics, approximately 149,500 new cases of CRC and approximately 52,980 related deaths are expected in the United States in 2021. Based on age distribution in the U.S. population according to U.S. Census data and statistics from ACS Colorectal Cancer Facts and Figures 2020-2022, we estimate that the CRC screening opportunity in the United States alone represents a target market of approximately 30 million unscreened patients.

According to the ACS Cancer Facts and Figures 2021, liver (including intrahepatic bile duct) cancer is the thirteenth most common cancer among new cases and the sixth most common cause of cancer death in the United States with 30,230 deaths expected in 2021.

Lung cancer is the second leading cause of cancer deaths in men and women in the United States (not counting skin cancer), with the ACS estimating approximately 235,760 newly diagnosed cases of lung cancer and 131,880 deaths from the disease in 2021, noting that the chances for developing lung cancer are much higher for smokers (source: ACS Lung Cancer Statistics). Accordingly, we believe that there is a large and identifiable at-risk population in the United States for diagnostic screening under medical guidelines.

We believe that due to the high prevalence of, and large at-risk population for, cancers such as colorectal, lung and liver cancer in the United States, there is a potentially significant market for IVD screening tests such as our Epi proColon and, if (at all) approved in the future, our HCCBloodTest.

9.3.2. The Cancer Diagnostics Market in Europe

In Europe, lung cancer was the most common cause of death from cancer among men in 2020, accounting for 24% of all cancer deaths, followed by colorectal cancer accounting for 12.2%, while liver cancer was the sixth most prevalent cause, accounting for 4.7% of cancer deaths (source: Globocan 2020). With respect to women, according to the same source, lung cancer accounted for 14.3% of cancer deaths and colorectal cancer for 13% of cancer deaths in 2020. According to the World Health Organization (WHO), there were around 87,600 liver cancer incidences in Europe in 2020, with around 78,400 deaths in the same year (source: Globocan 2020).

While we believe that, due to the high prevalence and large at-risk population of cancers such as colorectal, liver and lung cancer in Europe, our products may be used successfully in Europe, local market entry barriers are high for us. According to our analysis, differences in local regulation, reimbursement practices and care patterns add complexity to the acceptance and marketing of molecular diagnostic products across Europe and result in a high fragmentation of the European cancer diagnostics market. As cancer screening is organized on a governmental level in most European countries, the barriers to entry into such systems are typically very high. Self-payer segments are small in most markets and need to be addressed individually on the physician and patient level.

9.4. Impact of COVID-19 on our markets

COVID-19 has had an enormous impact on the markets in which we operate: Due to COVID-19 and associated measures aiming to reduce the spread of the disease, elective procedures and screening exams for cancer have been delayed or canceled since April 2020 (source: Study on COVID-19, Cancer Care and Prevention). For example, in April 2020, in the United States screenings for colon and lung cancers were lower by 75% and 56%, respectively, compared to April 2019 (source: Study on the Impact of COVID-19 on Cancer Care).

COVID-19 related IVDs are used in COVID-19 detection and additional IVD tests are deployed after a COVID-19 diagnosis (source: IVD Market Research Report). For example, the U.S. molecular diagnostics market increased from about USD 3.6 billion in 2019 to USD 36.2 billion in 2020 (source: Grand View Research 2021). According to the same source, the polymerase chain reaction ("**PCR**") segment accounted for 83.3% of this market in 2020. We believe this improved the reputation of medtech segment in general and particularly its IVD subsegment. With the increased focus IVD testing related to COVID-19, it cannot be ruled out that new players might enter the IVD subsegment or existing players might intensify their efforts, which could lead to increased competition.

For further details on the impact of COVID-19 on, among other things, clinical trials and commercialization activities, see *1.1.4. "Risk Factors — Risks Related to our Business — COVID-19 has, and continues to, negatively affect segments of the global economy and has similarly negatively affected our operations, including, among other things, interrupting our supply chain, clinical trials and commercialization activities, as well as, delaying approvals and reimbursement decisions and may continue to do so in the foreseeable future."*

9.5. Competition

9.5.1. Overall Competitive Situation

We consider our market to be competitive with competitors of all sizes vying for business, from large European (*e.g.*, Roche, Philips and bioMérieux) and U.S. players (*e.g.*, Abbott, Exact Sciences Corp., and Becton Dickinson) to small companies like us. We believe that the consolidation trend witnessed in previous years will remain noticeable and buyers will be particularly interested in manufacturers of R&D instruments and accessories for NGS or drug discovery, as well as companies producing novel and unique diagnostic tests. At the same time, according to the Deloitte 2020 Sector Outlook, such companies may be increasingly backed by private equity and venture capital investments, allowing them to continue development into later stages and to commercialize their products independently, which might lead to higher market shares for such small companies.

We believe that recent industry trends (such as liquid biopsies and NGS) will continue to fuel the already strong industry competition and might lead to market consolidation in the near and mid-term future.

Our competitors and potential competitors may have widespread brand recognition and substantially greater financial, technical and research and development resources and selling and marketing capabilities than we do. Others may develop products with prices lower than ours that could be viewed by healthcare providers and payors as functionally equivalent to our solution, or offer solutions at prices designed to promote market penetration, which could force us to lower the price of our current and future products and affect our ability to achieve or maintain sufficient market share (see also *1.1.6. "Risk Factors — Risks Related to our Business — The success of Epi proColon depends on its market acceptance by physicians, payors, Laboratory Customers, patients and others in the medical community."* and *1.2.1. "Risk Factors — Risks Related to the Industry in which*

we Operate — We operate in a highly competitive and rapidly changing industry, which may result in others creating more reliable diagnostic applications or more attractively priced products.").

9.5.2. Colon Cancer Screening

To our knowledge, Epi proColon is the first and currently only FDA-approved blood-based screening product for the early detection of colorectal cancer. We expect to face competition from a number of companies already operating in, or that are developing solutions for, colorectal cancer screening, including imaging-based methods, stool-based diagnostic tests and other blood-based tests. These companies will promote their services and products in the population not compliant with colorectal cancer screening, which is also the target population for our Epi proColon test. However, particularly since to our knowledge none of the other currently available FDA-approved products for CRC screening are blood-based and our Epi proColon test aims at patients who are non-compliant with guideline recommended stool-based tests or colonoscopy, we believe competition from such competitors should be limited.

We rather believe that our competition will primarily come from companies that are offering or plan to offer other blood-based tests for colorectal cancer detection. To our knowledge, the following companies have developed blood-based tests for the detection of colorectal cancer: Guardant Health, Redwood City, California, United States; Exact Sciences, Madison, Wisconsin, United States, Innovative Diagnostic Laboratory, Richmond, Virginia, United States; Freenome, South San Francisco, California, United States; DiscernDX, Menlo Park, California, United States; VolitionRx, Belgium (in particular in Europe); and CellMax Life, Sunnyvale, California, United States (especially in South Korea). To our knowledge, none of these companies currently have FDA approval for their blood-based tests for colorectal cancer detection. Additionally, we are not aware of any of these companies having attempted or completed clinical trials that would be suitable to support a pre-market approval ("**PMA**") submission to the FDA. In addition, we are aware of a number of companies that are actively engaged in the research and development of blood-based tests for broad based cancer detection that may include the same, or similar, detection products as we are targeting. For example, Thrive Early Detection Corporation (purchased by Exact Sciences in 2020) in conjunction with Johns Hopkins Kimmel Cancer Center at Johns Hopkins University in the United States has developed a single blood test that screens for eight common cancer types and helps identify the location of the cancer (source: Report on Multi-Analyte Blood Test). The test, called CancerSEEK, is a noninvasive test that simultaneously evaluates levels of eight common cancer proteins and the presence of cancer gene mutations from DNA circulating in the blood (source: Report on Multi-Analyte Blood Test). The test screens for cancers of the ovary, liver, stomach, pancreas, esophagus, colorectal, lung, or breast (source: Report on Multi-Analyte Blood Test). Further studies of the test are currently underway. Furthermore, GRAIL Inc., a healthcare company based in California has announced validation data for its multi-cancer early detection blood test, which claims to detect more than 50 cancer types across all stages, with a false positive rate of less than one percent, through a single blood draw (source: GRAIL). When a cancer signal is detected, the test can supposedly also identify where the cancer is located in the body (the tissue of origin) with 93% accuracy (source: GRAIL). The company reports a detection rate of 67.3% across stages I-III (95% confidence interval: 60.7% to 73.3%) for a pre-specified set of twelve cancer types, that together account for approximately 63% of U.S. cancer deaths each year (source: GRAIL). Recently, the blood test by GRAIL Inc. has become available in the United States by prescription only (source: GRAIL).

In addition, we are aware of several companies that have expressed their intention to develop blood-based tests for the detection of CRC or have published initial research on new product developments. Any company deciding to apply to the FDA for PMA would first have to conduct and

complete the necessary prospective clinical trials. We consider, obtaining PMA for such tests to be time-consuming and expensive. Furthermore, a company would likely have to demonstrate clinical performance that is non-inferior to already approved tests.

9.5.3. Liver Cancer Detection

The liver cancer diagnosis market relies upon three main diagnostic methods, namely imaging technologies such as ultrasound scans, IVD screening, and liver biopsy as a confirmatory diagnostic test. Given recent technological advances in HCC surveillance, in our view it is possible that more sensitive and specific, therefore more efficient, surveillance methods may gain market shares. In our opinion our HCCBloodTest, which measures promoter methylation in circulating cell-free DNA, represents a new category of surveillance methods, which we believe to be capable of gaining market share. However, the market in HCC surveillance products is highly competitive, with similar products being produced by numerous companies, such as Exact Sciences Inc., Madison, Wisconsin, United States. We are currently aware of a number of companies that are actively engaged in the research and development of blood-based tests for the same, or similar, detection products as we are targeting.

In our opinion, success in this market is dependent upon reliable, high sensitivity indications receiving regulatory approval for use in the different geographic markets. The HCCBloodTest is used to detect liver cancer among patients with cirrhosis. A cross-sectional study of the HCCBloodTest in the United States is being conducted since late 2019, with results being expected in the short-term.

9.5.4. Lung Cancer Detection

We estimate, that the lung cancer diagnosis market is currently predominately served by imaging technologies, and both primary screenings and follow-up confirmatory diagnostic tests primarily utilize radiological methods. An additional approach, as a follow-up diagnostic procedure to confirm suspicious results from a primary screening, is to collect a sample from the affected region, either by a bronchoscopy or through a biopsy procedure, in order to subject the obtained tissue sample to a pathological examination. According to our market observation, in recent years, companies have begun developing various laboratory tests to be performed on these pathological samples in order to increase the accuracy of pathological observations.

10. BUSINESS

10.1. Overview

We are a commercial-stage molecular diagnostics company focused on patient-friendly, blood-based IVD tests for the screening and diagnosis of cancer. We develop cancer diagnostic tests, mainly in the colorectal and liver cancer fields. Our key product, Epi proColon, a blood-based screening test for the detection of colorectal cancer, was approved for sale in the United States by the FDA in April 2016. To our knowledge, Epi proColon is the first and currently only FDA-approved blood-based screening product for the early detection of colorectal cancer. Since the FDA approval for Epi proColon, we have transitioned into an organization with an increased focus on commercializing our products, in particular our key product, Epi proColon, which we primarily distribute indirectly through sales partnerships, including in our key market, the United States, but also via direct marketing and sales of IVD kits in some other markets, including in Europe. In addition, we are pursuing the further development of our key product candidate, Epi proColon Next-Gen which is a yet more advanced version of our CRC screening blood test.

In the United States, we are currently focused on the commercialization of Epi proColon. Together with our sales partner Polymedco, which acts as an exclusive sales and marketing agent on a commission basis, we market Epi proColon to Laboratory Customers, which in turn offer the assay as a screening service and collect payments from their customers, including commercial third-party payors and government health benefit programs.

In recent years, we have made progress in achieving U.S.-wide availability for Epi proColon, and are working on health insurance reimbursement for the test, specifically Medicare reimbursement. Achievement of Medicare coverage will be the most significant milestone for us. Medicare patients not only represent a large portion of the relevant market for Epi proColon, but Medicare has also typically been viewed as an industry benchmark for pricing and benefit coverage. While CMS have set a final Medicare reimbursement rate of USD 192.00 per Epi proColon test with effect from January 1, 2019, on January 19, 2021, CMS decided not to cover Epi proColon under Medicare as part of an NCD for screening for colorectal cancer with blood-based biomarker tests. The decision argued, among other things, that Epi proColon does not meet the criteria for an appropriate blood-based biomarker CRC screening test, in particular, regarding its level of sensitivity and specificity. We believe that such performance criteria are arbitrary and in conflict with scientific evidence which, in our opinion, the decision did not adequately take into account. We are therefore currently evaluating options regarding the national non-coverage decision by CMS (for details, see *10.7.2. "— Epi proColon Medicare Reimbursement — Medicare Coverage"*). In addition, we are focusing even more on the development of a yet more advanced CRC screening blood test, Epi proColon Next-Gen, which will take at least a few years before becoming commercially exploitable (if ever), but which we believe is showing promising early results.

In addition to the U.S. version of Epi proColon, we market a slightly modified version of the product under the name Epi proColon 2.0 CE directly or through distributors in countries with established screening policies, including select European and Southeast Asian markets. Epi proColon 2.0 CE is approved by the Chinese National Medical Products Administration ("**NMPA**") and CE marked, indicating that it is approved for sale in all countries that accept the CE mark as pre-requisite for commercialization.

Depending on the territory, we market and sell Epi proColon either through distributors or directly to Laboratory Customers and other smaller customers, or both.

Furthermore, based on promising results from clinical studies, we plan to take additional steps towards marketing a test for the identification of liver cancer in patients suffering from cirrhosis under the name "HCCBloodTest" in the United States and Europe in the future. However, as we are currently focusing on commercializing of our key product, Epi proColon, in particular achieving Medicare coverage for it, the progress in further developing our HCCBloodTest hinges on the availability of appropriate additional financial resources.

We also achieved a CE mark for our product Epi proLung in 2017. This product is a blood-based test to assist in the detection the presence of lung cancer in blood plasma. Epi proLung is based on a combination of certain of our proprietary DNA methylation biomarkers. Our goal is to continue to optimize the performance of the product in order to initiate the prospective trials necessary for larger scale adoption.

Our research and development efforts are targeted at developing product candidates based on specific DNA methylation biomarkers that can be used to identify the presence of certain cancers and are potentially useful for screening, diagnostic, prognostic or predictive purposes. In particular, we are currently focused on developing various liquid biopsy products based on NGS technology, which uses bisulfite sequencing methods to analyze one patients' sample using multiple biomarkers at the same time, increasing the speed and efficiency of the testing process. In 2016, we completed the first proof-of-concept studies for the use of NGS for liquid biopsy purposes, we further refined and optimized these protocols in 2017 and we established three further NGS panels across multiple cancer types. In 2018, we developed multiplexed methylation-based biomarker panels for the analysis and detection of multiple cancers from a single blood specimen using NGS. We have been able to develop a prototype and proprietary 56 marker comprehensive NGS cancer panel, which we are working to clinically validate in the future. There are now prototype NGS panels for the detection of colorectal, liver, lung, prostrate, bladder and kidney cancer. Our research group is also studying a number of gene methylation markers for head and neck cancer using NGS.

In addition to biomarkers for liver, bladder and prostate cancers, we have also identified additional DNA methylation biomarkers for blood-based diagnosis of other solid tumors, for example gastric cancer, that could provide the basis for future product development opportunities.

We maintain a patent portfolio with 37 owned patent families and one non-exclusively in-licensed patent family (data as of June 30, 2021), which we believe offers protection for our current and future products and technologies in multiple territories. We believe this intellectual property portfolio, in conjunction with the potential research capabilities of the new NGS technology, provides us with opportunities to develop new and even better cancer tests.

10.2. Our Strengths

We believe that the following strengths and, in particular, their combination, distinguish us from our competitors and are a basis for further growth and success of our business:

- To our knowledge, Epi proColon is the first and currently only FDA-approved blood-based screening product for the early detection of CRC;
- In our view, we offer a compelling, cost-effective value proposition for patients, healthcare providers, payor organizations, and Laboratory Customers with the Epi proColon test that addresses a significant unmet medical need among the large population of adults who do not undergo medically recommended regular CRC screening;
- Early clinical data for our most recent product candidate for CRC screening, Epi proColon Next-Gen, suggests that such test may be even more accurate than our existing Epi proColon test

and may potentially meet the current sensitivity and specificity requirements established by CMS for Medicare coverage for blood-based biomarker CRC screening tests;

- We have a strong commercialization infrastructure established through commercial partnerships, with a commercialization approach that presents a new opportunity for Laboratory Customers to provide CRC screening;
- With our HCCBloodTest for the detection of liver cancer based on methylated Septin9, we believe to have an opportunity to establish ourselves in the market for therapy management for severe illnesses, where we believe reimbursements for medical products and services may be more readily obtained in comparison to diagnostic screening;
- We believe that, in an environment of increasing trends toward tightening regulatory standards, our approach of choosing the regulated path to commercialization of our products provides us with a competitive advantage over those companies which do not or cannot comply with these stricter requirements;
- We have secured an extensive proprietary intellectual property portfolio consisting of 37 owned patent families and one non-exclusively in-licensed patent family (data as of June 30, 2021), which we believe to be a competitive advantage over many of our competitors in the field of DNA-based diagnostics, whose businesses partly rely on generic technologies or products;
- We believe our current additional pipeline (as of June 30, 2021) of eleven proprietary, patent-protected biomarkers has the potential to be used to develop additional IVD tests for the prognosis, diagnosis and screening of various cancer types; especially in conjunction with the know-how we have developed in new NGS technology; and
- We also believe that the experience and know-how of our management and personnel, in particular our research and development personnel, provides us with a competitive advantage over competitors.

10.3. Our Strategy

10.3.1. Operational Strategy

We seek to become a leader in the liquid biopsy cancer molecular diagnostics field, and to establish our diagnostic tests as vital components of the cancer diagnostics standard of care. We believe our approach is transforming cancer detection into an accessible and cost-effective solution that meets the needs of patients, healthcare providers and payors, and will improve patient outcomes and reduce healthcare costs. By developing diagnostic tests based on liquid biopsies, *i.e.*, tests to be performed on samples of blood, urine, or saliva, the relevant diagnostic information can be delivered more easily, without the complications associated with tissue biopsy, and at potentially lower costs.

Our corporate strategy focuses primarily on what we believe to be the two key factors that are most critical in achieving our goal of becoming a leading liquid biopsy company: the successful market adoption of Epi proColon and, in the long run, our continued development of new liquid biopsy offerings, such as our HCCBloodTest. We believe that establishing leadership in liquid biopsy, primarily through the commercialization of Epi proColon, which we believe to be a pioneer product in the fast-growing area of IVD testing, has the potential to allow us to introduce other disruptive products such as the HCCBloodTest and potential future tests for other types of cancer based on the biomarkers that our research has identified.

Our commercial strategy is initially primarily focused on the commercialization of Epi proColon in the United States, as this is not only where we see the greatest economic opportunities, but also where we believe new diagnostic technologies are typically applied first.

Based on our observations, we believe that patients who decline a colonoscopy for CRC screening and are subsequently asked to choose between a stool test and a blood test as an alternative are overwhelmingly choosing blood test, such as Epi proColon. In practice, however, in the United States, choosing Epi proColon currently involves an additional cost consideration for patients, as they have to pay for this test themselves, whereas patients who choose a stool test are typically reimbursed for the cost of such test and thus bear little or no cost themselves. We believe that a key condition for commercial success in the United States is securing such reimbursement also for Epi proColon, *i.e.*, convincing the payors in the U.S. healthcare system to reimburse their patients for the cost of carrying out our test. Because major third-party payors such as Medicare, private insurance plans, and managed care programs dominate the healthcare market in the United States, receiving favorable reimbursement decisions from such third parties, in particular Medicare as the industry benchmark, we believe is critical to increasing demand among patients, doctors and Laboratory Customers, as well as to increasing revenues.

Since receiving FDA approval for Epi proColon in 2016, Medicare reimbursement for Epi proColon on the U.S. market has been our top focus and remains our most significant milestone in the future. This is reflected in the three key areas of our reimbursement strategy: (i) Medicare rate; (ii) Medicare coverage; and (iii) private payor adoption, which tends to be strongly influenced by the first two areas. After we were able to obtain a favorable final Medicare reimbursement rate of USD 192.00 with effect from January 1, 2019, we are now focused on a positive Medicare coverage decision, which can be achieved either through the adoption of a bill by U.S. Congress or an NCD issued by CMS. In January 2021, CMS issued a negative reimbursement decision stating that, among other things, Epi proColon did not meet certain minimum levels of sensitivity and specificity as determined in the NCD. Together with several professional societies such as ACS, which raised its concerns during the public comment period for the NCD (source: Public Comments in the MCD), we consider the performance criteria set forth in the NCD to be arbitrary and in conflict with scientific evidence. We are therefore currently evaluating options regarding the negative NCD (for details, see *10.7.2. "— Epi proColon Medicare Reimbursement — Medicare Coverage"*.).

In light of the negative reimbursement decision by CMS in January 2021, we had to adjust our previous plans regarding commercialization of Epi proColon in the United States. Besides evaluating options regarding the decision, we are now focusing even more on our product candidate Epi proColon Next-Gen, which is a yet more advanced version of our CRC screening blood test. While the test is still under development and will take at least a few years before becoming commercially exploitable (if ever), we believe it may potentially meet the sensitivity and specificity requirements set out in the NCD. Our primary goal moving forward will be to obtain the necessary FDA approval and subsequent reimbursement commitment for this new version of our CRC screening blood test. For details, see *10.5.3. "— Our Products and Product Candidates — Epi proColon Next-Gen"*.

One of the factors we believe may positively affect certain reimbursement decisions is the inclusion of our tests in screening guidelines issued by the ACS or other guideline groups. We are therefore working towards inclusion of our products, in particular of our key product, Epi proColon, in such guidelines. In this regard, we were able to achieve a first milestone in April 2020 by Epi proColon being included in the guidelines of the NCCN.

In Europe, for the time being, our strategy involves a very limited focus on commercialization of Epi proColon because the European market for IVD products is highly fragmented and dominated by local effects in each country. Moreover, in many European countries, CRC screening is organized

on a governmental level and, thus, the barriers to entry into such markets are typically very high. According to our assessment, there are relatively few self-payers in the European market, who need to be addressed individually at the physician and/or patient level. For this reason, we are currently only focusing on Epi proColon commercialization to a limited extent in Europe. In some selected countries (for example, Germany, France and Spain), we sell the product ourselves, while in others we sell Epi proColon through distribution partners. Our customers in Europe have been mainly Laboratory Customers, as well as other smaller customers, such as clinics and researchers, with currently only small ordering volumes.

Outside the United States and Europe, we have identified certain markets in Asia (especially in Southeast Asia) where we believe there is a good chance for self-payer acceptance of our Epi proColon test. We serve such markets mostly through local distributors. For example, in 2020, we gained access to the markets on the Arabian Peninsula through such a distributor.

We seek to achieve our commercialization targets through our own commercialization activities, as well as through commercialization and sales partnerships, such as with Polymedco. We believe that the strategy of entering into partnerships reduces the risks associated with autonomous market entry of our products and product candidates from scratch, because it gives us access to already existing sales and marketing channels. In the commercial partnerships into which we have entered, we typically pay a sales commission or receive a participation in the profits of our partners through upfront and milestone payments, but most importantly through royalties.

With respect to the marketing of the HCCBloodTest in the United States and Europe, we obtained CE marking for the product in Europe in October 2018 and conducted a cross-sectional study in the United States in 2020, the findings of which are currently under review. We believe our HCCBloodTest provides us with an opportunity to establish ourselves in the market for therapy management for severe illnesses. As we believe it to be easier to obtain reimbursement for such services, compared to diagnostic screening, this, in our view, creates an attractive market opportunity for us. Additionally, as monitoring liver cancer is generally carried out in a few specialized liver centers, it is possible for us to focus distribution and marketing efforts.

We aim to prioritize our commercial and R&D efforts by first focusing on achieving reimbursement for Epi proColon in the United States. In addition, we intend to pursue the further development of our key product candidate, Epi proColon Next-Gen which is a yet more advanced version of our CRC screening blood test. We will also look to focus on the further development of our HCCBloodTest. Thereafter, we aim to use the remaining resources to optimize Epi proLung. We currently expect that our capital and personal resources will be dedicated to these activities in this order. For further details on how the availability of funding effects our strategy, see *7.3.3. "Operating and Financial Review — Key Factors Affecting Results of Operations, Financial Position and Cash Flows — Funding and Liquidity"*.

10.3.2. Evaluation of Strategic Options

In light of the recent negative reimbursement decision for Epi proColon by CMS and the resulting significant delays in our efforts to commercialize Epi proColon, as well as our constant need to raise additional funds as we have not reached the cash flow break-even point, we have initiated a structured process in February 2021 to explore and evaluate alternative strategic options. To this end, we have engaged Raymond James Financial International Limited as a financial advisor that is assisting us in structuring this process and evaluating our options.

As part of this process, we are considering a wide variety of strategic options including, but not limited to, a third party potentially submitting a takeover offer to our shareholders, the sale of all or substantially all of our assets, a strategic partnership or joint venture, or developing alternative

financing sources which may include attracting new (equity) investors, for example, through an initial public offering of a (newly established) subsidiary on NASDAQ. As a first measure, on August 17, 2021, the Company, as seller, entered into a sale and transfer agreement with New Horizon Health Limited, as purchaser, for the sale of a number of the Company's non-essential blood samples for an aggregate purchase price of USD 6.7 million (subject to certain adjustments, see *11.6. "Material Agreements — Blood Sample Sale Agreement"*). Irrespective of this transaction, we intend to continue pursuing the aforementioned strategic options.

We anticipate that this process will take time and entail significant costs. Moreover, there can be no assurance that we will succeed in implementing any additional strategic options (see *1.1.2. "Risk Factors — Risks Related to our Business — Medicare coverage for our key product, Epi proColon, was denied in January 2021, resulting in significant delays in our efforts to commercialize the product. In light of these events, and our constant need to raise additional funds, we are currently exploring potential strategic options including, but not limited to, a third party potentially submitting a takeover offer to our shareholders, the sale of assets, a strategic partnership or joint venture, or developing alternative financing sources which may include attracting new (equity) investors. This structured process is costly, time-consuming and may fail at any point. Even if we were to successfully conclude a potential transaction as part of this structured process, it could have a negative impact on us and/or our shareholders."*).

10.4. Our Technology Platform

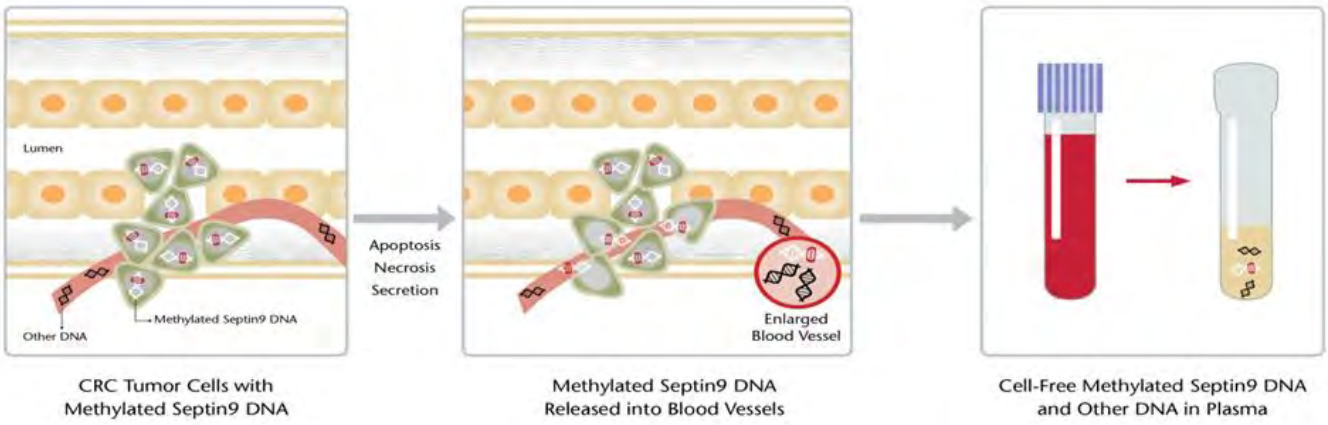
Our key product, Epi proColon, our other products and product candidates, specifically Epi proColon Next-Gen, are designed to enable the accurate detection of cancer to reduce mortality rates and lower overall healthcare costs. They are based on epigenetics, the study of changes to genetic function that are not associated with changes in DNA sequence. More specifically, our products and product candidates are based on the detection of DNA methylation changes that have been found to occur in cancer cells. DNA methylation is a biological phenomenon in which one of the four building blocks of the DNA, the nucleotide cytosine, is modified through the addition of a methyl group. This change may affect the gene's original function. Multiple methylations of the DNA at different sites of the gene or DNA methylation patterns can be cell-type specific and often manifest themselves in disease, especially in cancer, and, therefore, can serve as disease-relevant biomarkers for screening, diagnostic, prognostic and predictive purposes. Our key product, Epi proColon, is based on a specific DNA methylation of the Septin9 gene, which provides instructions for the synthesis of a protein called Septin9 involved in many cellular functions. The DNA methylation status of the gene can be used clinically as a strong indicator for the presence of colon cancer in the general population of individuals 50 to 75 years of age, and the presence of the most common form of liver cancer known as HCC among high risk patients with cirrhosis of the liver (source: ACS Liver Cancer Information).

Based on our proprietary technologies, we can detect DNA methylation changes with broadly used and commonly available diagnostic testing methods and instruments, such as the PCR and NGS. Diagnostic PCR and NGS instruments are commonly available in laboratories across the world.

Our intellectual property portfolio is designed to protect all steps of our analytic process. We have optimized a series of assay components to (i) extract double-stranded DNA from the blood, (ii) convert the unmethylated DNA to a different sequence by a chemical process referred to as bisulfite conversion, and (iii) specifically detect the presence of the targeted methylated DNA sequence using PCR or other methods. Through our own research, we were able to identify that the DNA methylation of a particular gene, the Septin9 gene, is a biomarker highly correlated with the presence of CRC and HCC when used in varying clinical contexts. Our key product now on the

market as Epi proColon, is able to detect the very small quantities of methylated Septin9 biomarker that is present in the blood plasma of patients with CRC. The biochemical performance of our test for the detection of HCC, HCCBloodTest, currently mimics that of our Epi proColon test.

The illustration below is a schematic representation of the release of DNA from tumor tissue growing on the inner side of the large intestine, or colon of a patient. It shows how the tumor derived cell-free DNA is released into the patient's bloodstream, where our test detects the methylation status of the Septin9 gene. The detection of methylated Septin9 is thereby possible at a level of approximately 1 to 2 copies of the methylated Septin9 gene per milliliter of blood plasma, which represents, according to our estimate, one of the most analytically sensitive PCR assays currently available on the market. Although not illustrated, the mechanism for the release of cell-free DNA into the patient's bloodstream is similar in liver cancer.



Our test to detect the presence of methylated Septin9, which constitutes the basis for Epi proColon, is characterized by:

- *Extensive validation*. The product is approved by the FDA, the NMPA and is CE marked in Europe. The performance of the Septin9 biomarker and Epi proColon has been established in multiple independent studies including approximately 10,000 patients globally (see *10.5.8.1. "— Our Products — Overview of Clinical Studies — Epi proColon"*);
- *High clinical sensitivity*. In multiple clinical studies, Epi proColon consistently identified 68-81% of colorectal cancers in clinical studies (see *10.5.8.1. "— Our Products — Overview of Clinical Studies — Epi proColon"*); and
- *Robustness and Reproducibility*. The robustness and reproducibility of the Epi proColon test has been evaluated extensively through studies and has demonstrated an equivalent and reliable performance across multiple laboratories. Repeated use of Epi proColon by multiple operators and laboratories showed a reproducibility of results of more than 95%.

With respect to HCCBloodTest, in April 2018, two independent clinical studies conducted in France and Germany, which examined blood from cirrhotic patients with and without HCC, found that among patients with cirrhosis, the methylated Septin9 test constitutes a promising circulating epigenetic biomarker for HCC diagnosis at the individual patient level. These results indicate that methylated Septin9 exhibits higher diagnostic accuracy for HCC detection than other currently available standard of care surveillance methods including the use of AFP (source: mSEPT9 Research Paper). We recently have also submitted a manuscript for publication on a new NGS methylation gene marker panel for liver cancer detection. The panel, which does not include Septin9, together with AFP appears to provide improved detection of early stage cancer with high specificity.

In addition to our proprietary Septin9 biomarker, we have been able to identify several other genes, which, by means of selective methylation, are indicators of the presence of other cancers. For example, we have been able to show and obtain patent rights on the fact that a specific methylation of the Short Stature Homeobox 2 ("**SHOX2**") gene is an indicator of the presence of lung cancer. Based on this finding and in combination with another proprietary methylation marker encoding the prostaglandin E receptor 4 ("**PTGER4**"), we have developed a first generation blood test for lung cancer named "Epi proLung".

We believe that by using our proprietary technology platform, we should be able to discover additional disease markers that could be developed into diagnostic products used for screening, diagnostic, prognostic or predictive purposes for the detection of other solid tumors such as prostate, bladder, liver, gastric and head and neck. For example, we have been developing multiplexed methylation-based biomarker panels for the analysis and detection of multiple cancers from a single blood specimen using NGS. We have been able to develop several prototypes and proprietary NGS cancer panels, which may clinically validate in the future.

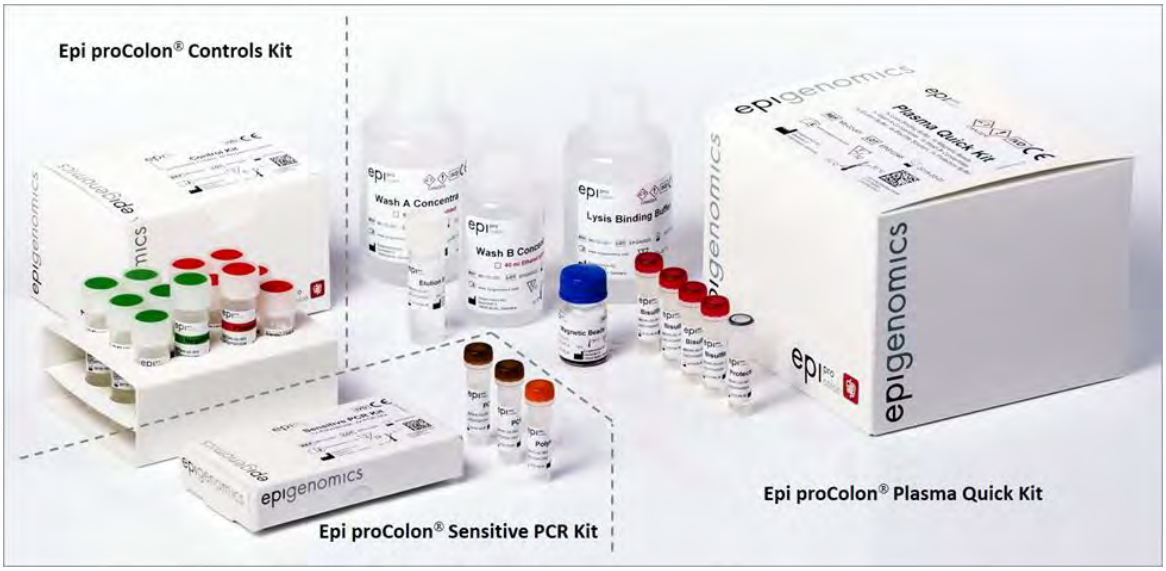
10.5. Our Products and Product Candidates

10.5.1. Epi proColon

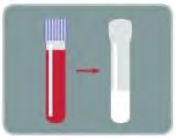
Epi proColon is the brand name we use for our blood-based screening test for colorectal cancer and it relies on detecting changes in the DNA methylation of Septin9, which, as explained above, is a highly accurate biomarker in the presence of colorectal cancer. Detection of methylated Septin9 in blood plasma represents a straightforward, minimally invasive method for detecting colorectal cancer throughout all stages of the disease. The Septin9 DNA biomarker is present only in very small quantities, especially in the blood plasma of early-stage cancer patients. The entire amount of DNA present in a 10 ml blood sample from a patient is extracted, and after a chemical modification, the extracted DNA is subjected to PCR in order to maximize the test's ability to detect even very small amounts of methylated Septin9 as an indicator for the presence of colorectal cancer. A negative test result, as characterized by the absence of methylated Septin9 in the patient's blood sample, indicates a reduced likelihood of the presence of colorectal cancer. In such cases, patients are advised to discuss all colorectal cancer screening options with their healthcare providers after one year. A positive test result indicates an increased likelihood of the presence of colorectal cancer, and such patients should be referred to a gastroenterologist for further diagnosis, such as a colonoscopy.

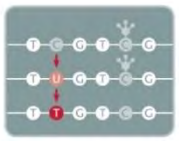
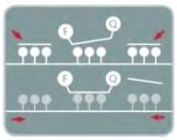
We received FDA approval for Epi proColon on April 12, 2016. In addition, a version of Epi proColon is CE-marked and approved for sale in all countries that accept the CE mark as a pre-requisite for commercialization, as well as in China, where it was approved for commercialization in December 2014 by the China Food and Drug Administration (now the NMPA) (see *10.5.2. "— Epi proColon 2.0 CE"*).

The product is comprised of three elements: Epi proColon Plasma Quick Kit, which includes the reagents required to extract DNA from the blood sample and for the bisulfite conversion of 32 samples; Epi proColon Sensitive PCR kit which includes the reagents required for PCR-based detection of the methylated Septin9 gene in 32 samples; and Epi proColon Control kit, which includes positive and negative quality control samples to be run in parallel with clinical samples in order to verify that the procedure was accurately followed and the results are valid and reportable. These three components are shown in the image below:



The chart and steps below summarize the flow of the Epi proColon® process:

Step 1: Blood draw	
	• A 10 milliliter standard blood collection tube is filled with the patient's blood sample, either at the physician's office during a visit or at a laboratory blood-drawing facility • Once collected, the blood sample is refrigerated and sent to a clinical laboratory for testing
Step 2: Blood plasma separation	
	• The blood sample is submitted to centrifugation, a process by which the red blood cells are separated from the supernatant liquid, or blood plasma • The centrifugation step is either performed at the clinical laboratory or, if the appropriate equipment is available at the blood draw facility, at the time of the blood draw
Step 3: DNA isolation and purification	
	• The total amount of free circulating DNA present in a 3.5 milliliter blood plasma sample is collected by the DNA's binding to specially coated magnetic beads • After a wash step to eliminate the presence of other blood components, the DNA is eluted from the beads and concentrated

Step 4: Bisulfite conversion	
	• The present non-methylated DNA base cytosine is altered, while the methylated cytosine bases are left unaltered • The methylated Septin9 DNA sequences are therefore different from their non-methylated counterparts • DNA isolation, purification and bisulfite conversion are performed with the reagents provided in the Epi proColon Plasma Quick Kit
Step 5: PCR amplification	
	• PCR amplification and detection is carried out on a standard instrument, the AB 7500 Fast Dx manufactured by Life Technologies AS, Oslo, Norway ("**Life Technologies**") a subsidiary of Thermo Fischer Scientific Inc., Waltham, Massachusetts, United States • PCR is a process by which specific sequences of DNA are amplified, while all other DNA sequences are not • For the Epi proColon test, the methylated Septin9 sequence is amplified. Amplification means that even small amounts of the target DNA that is present is multiplied over and over again, thus increasing their concentration by orders of magnitude above all other sequences present • After multiple cycles of amplification, a photochemical process that results in the emission of light is used, where the light is detected and analyzed by the PCR instrument • The PCR amplification step is performed with the reagents provided in the Epi proColon Sensitive PCR Kit • The entire amount of DNA extracted from each blood specimen is split into three portions, which are all independently tested for the Septin9 biomarker through PCR • A patient's blood sample will be called "positive" if at least one of the three portions of extracted DNA tests positive for Septin9 through PCR
Step 6: Reporting of results	
	• Once a test result has been generated (either positive or negative) the laboratory reports the result to the patient's healthcare provider • A negative test result will lead to a recommendation for the patient to return to his physician for consultation and recommendation of colorectal cancer screening options after one year

	• A positive test result will lead to a recommendation by the healthcare provider to refer the patient to a gastroenterologist for a colonoscopy to confirm the diagnosis

The lack of compliance with current screening guidelines is one of the largest obstacles in addressing mortality due to colorectal cancer (source: ACS Colorectal Cancer Facts and Figures 2020-2022). Because the Epi proColon test is based on a simple blood sample, we believe Epi proColon will encourage high patient participation. The "Adherence to Minimally Invasive Testing Study," or "**ADMIT study**", was conducted as a multi-center study at clinical centers within the Kaiser Permanente and Geisinger Health Systems in the United States. The study recruited 490 participants of which 413 were enrolled as they met average-risk, screening-eligible patients criteria and were historically non-compliant with current screening guidelines. The study demonstrated a 99.5% rate of adherence to colorectal cancer screening using Epi proColon (see *10.5.8.1.3. "— Overview of Clinical Studies — Adherence to Minimally Invasive Testing Study"*).

We believe that our Epi proColon test:

- Is convenient for the patient, can be administered as part of a routine medical examination and therefore should promote increased patient compliance with colorectal cancer screening, especially for patients that are not compliant with other colorectal cancer screening tests such as colonoscopy or fecal tests;
- Is simple and efficient to administer and produces test results that are easy for healthcare providers to interpret, thereby helping healthcare providers to increase colorectal cancer screening participation in their patient populations;
- Can be run on existing equipment in clinical laboratories and, therefore, presents an opportunity for the laboratories to engage in colorectal cancer screening;
- Offers a compelling value proposition for healthcare payor organizations for a disease that, according to our estimates, is associated with a significant annual cost of treatment in the United States; and
- Provides an attractive new option for the non-compliant, and therefore unscreened, population through its minimally invasive nature and ease of sample collection. We estimate a target market of approximately 30 million people unscreened in the United States alone (based on U.S. Census data and ACS Colorectal Cancer Facts and Figures 2020-2022).

We aim to leverage the value of our methylated Septin9 biomarker for detecting colorectal cancer, potentially in combination with other proprietary biomarkers, in other populations, such as high-risk patients, and for patient care and management (*e.g.*, monitoring disease recurrence and potentially prognosis assessment). We believe the results of the recently published microsimulation and decision modeling studies (see *10.5.8.1.4. "— Overview of Clinical Studies — Epi proColon — Clinical Utility: Microsimulation & Decision Modeling Analysis"*) will support us in this regard. Furthermore, we are conducting a multi-center post-approval study (see *10.5.8.1.5. "— Overview of Clinical Studies — Epi proColon — FDA Post-Approval Study"*), with the goal of generating data to demonstrate the clinical value of repeat testing with Epi proColon. In doing so, we hope to establish the product as a standard screening test for colorectal cancer in the future.

In addition, we aim to leverage our Epi proColon test by offering automation solutions for Epi proColon processing to our Laboratory Customers (see also *10.5.4. "— Our Products and Product Candidates — Epi BiSKit and Automation Solution"*). Our R&D team developed a pipetting-robot

platform, which makes it possible to automate the processing of 48 or 96 plasma samples in parallel. The robots enable a lab technician to extract DNA from plasma samples, then perform the bisulfite conversion of the DNA obtained and finally clean the DNA treated with bisulfite while minimizing manual interaction. The technician loads the samples, runs a software module and, at the end of the process, obtains the cleaned, bisulfited DNA. The automation platform performs all tasks related to the reagent and liquid transfer, mixing, warming, shaking, incubation of reaction batches and capturing of magnetic particles and dispersion. The resulting DNA can be used for PCR amplification and analysis. Currently, a technician typically processes 16 samples at a time; using the new automation system, a single user can simultaneously process up to 96 samples in an eight-hour shift. The automation means higher throughput and lower processing costs per sample by reducing the time it takes to process them. Another benefit of automation is the improved precision, which leads to a lower degree of variability between the runs.

10.5.2. Epi proColon 2.0 CE

Epi proColon 2.0 CE, which is technically equivalent to Epi proColon, but has different instructions for use and uses a different algorithm to interpret test results, bears the CE mark and is currently available for sale in selected markets in the European Union and elsewhere. Epi proColon 2.0 CE was also approved by the China Food and Drug Administration (now the NMPA) in December 2014. The NMPA approval was obtained by our former partner BioChain, and we have been in discussions with NMPA to move the relevant filing authority from BioChain to us in connection with the renewal of the NMPA approval, which is still outstanding to the date of the Prospectus.

In both tests, Epi proColon and Epi proColon 2.0 CE, the entire amount of DNA extracted from each blood specimen is split into three portions, which are all independently tested for the Septin9 biomarker through PCR. According to the instructions for use of the FDA-approved test version, a patient's blood sample will be called "positive" if at least one of the three portions of extracted DNA tests positive for Septin9 by PCR. In contrast, according to the instructions for use of the CE marked version, a test will only indicate a patient's blood sample as "positive" if a minimum of two portions of extracted DNA test positive for Septin9 by PCR. In both cases, a positive result means that the patient should be referred to a gastroenterologist for further testing.

Epi proColon 2.0 CE was made available for sale beginning in 2012 in the European Union and other selected countries outside the United States that accept the CE mark as pre-requisite for commercialization.

10.5.3. Epi proColon Next-Gen

Building on our experience with Epi proColon, we have recently developed a new CRC screening assay product candidate, Epi proColon Next-Gen. This new, multi-target real-time PCR blood test is based on the same method as our existing Epi proColon test but uses a new proprietary core DNA methylation technology. We believe first clinical results to be promising. The interpretive algorithm used in the product candidate was trained in a study with about 450 samples comprising CRC patients and clinical controls. The clinical performance was then established using a total of approximately 2,500 plasma specimens, including more than 130 well-characterized CRC samples, from two independent clinical screening trials in the average-risk population. We believe the automated assay is highly robust, providing valid results for greater than 99% of samples analyzed, and provides a fast, easy-to-use and affordable option for detecting CRC using a blood sample. Because we interpret early clinical data for the test to meet the sensitivity and specificity requirements established by CMS for blood-based biomarker CRC screening tests in the NCD published on January 19, 2021 (see *10.7.2 "— Epi proColon Medicare Reimbursement — Medicare*

Coverage"), under such standards, we believe this product candidate or a modified version thereof may potentially be eligible for Medicare coverage in the future.

As a next step, we aim to conduct clinical studies for the test in the United States beginning in the second half of 2021 and, if results meet our expectations, work towards obtaining FDA approval in the medium term. There is now an established design for clinical studies. These kinds of study require approximately 12,500 patients and are expected to last at least two years. It is customary to collect all samples first, but not to perform the measurements until patient recruitment is complete or close to completion. This procedure provides for additional time to further optimize the assay by automation and/or incorporation of additional markers. We estimate that the further development and necessary studies will require a low double-digit EUR million amount in the short to medium term.

10.5.4. Epi BiSKit and Automation Solution

In June 2018, we completed the development of an automated process for labor-intensive portions relating to the bisulfate conversion of DNA, which may be used for the application of the Epi proColon test or other tests for DNA methylation. The Epi BiSKit provides a complete set of reagents for the preparation of bisulfite-converted DNA from plasma derived from human whole blood samples or urine samples. Using the reagents provided, each Epi BiSKit is intended to process 32 preparations, providing purified, sulfonated bisulfite-converted DNA for use in diverse, downstream molecular applications. Three kits can be used to process 96 reactions on a Tecan automated liquid handling instrument.

The technology works as follows: DNA is extracted from plasma by binding to magnetic beads. Impurities are removed from the magnetic beads by a wash step. The purified DNA is then released from the beads by suspension in an elution buffer, and treated with bisulfite reagents to produce sulfonated bisulfite converted DNA ("**bisDNA**"). The bisDNA is then re-purified using magnetic beads and cleansing steps to produce the finished product of pure, sulfonated bisulfite-converted DNA.

The output of this process can, for example, be used to enhance application of our existing products, such as Epi proColon, but also of other products requiring bisulfite-converted DNA, such as our liver cancer product (HCCBloodTest). Data on the Epi BiSKit and the automation process has been presented at the 2018 annual meeting of the Association for Molecular Pathology and has been published in different publications.

10.5.5. HCCBloodTest

We have modified our Epi proColon product to use the technology also for detection of liver cancer in a product called "HCCBloodTest". HCCBloodTest is a qualitative assay for the real-time PCR detection of methylated Septin9 DNA in bisulfite converted DNA from human plasma samples. It is a modified version of our Epi proColon 2.0 CE test, repurposed for the detection of HCC, the most common form of liver cancer, in patients diagnosed with liver cirrhosis (source: ACS Liver Cancer Information). While the presence of methylated Septin9 in non-cirrhotic patients is associated with CRC, in the blood of a patient with cirrhosis, the presence of methylated Septin9 is 30 times more likely to indicate the presence of HCC than CRC (source: mSEPT9 Research Paper).

In April 2018, we had announced the results of two independent clinical studies which show high accuracy of our Septin9 biomarker for detecting liver cancer in patients suffering from cirrhosis. In particular, these results indicate that methylated Septin9 exhibits higher diagnostic accuracy for HCC detection than other currently available standard of care surveillance methods, including the use of AFP (source: mSEPT9 Research Paper).

Given what we believe to be strong clinical data and good responses from the medical and scientific communities, and what we perceive as considerable diagnostic need around the world given the lack of a clear market standard for HCC testing, we quickly decided to develop a relevant product and announced this at the beginning of July 2018. Product development was rapid due to the Septin9 marker already used in our Epi proColon test and the proprietary technology applied for this, allowing us to obtain the CE mark in October 2018.

We conducted a small cross-sectional study in the United States in 2020 and plan to initiate additional studies in the future towards obtaining FDA approval. For details of the studies, see *10.5.8.3. "— Overview of Clinical Studies – HCCBloodTest Studies"*. A manuscript describing the findings of the cross-sectional study is currently under review for publication, which we expect in 2021.

We believe our HCCBloodTest provides us with an opportunity to establish ourselves in the market for therapy management for severe illnesses. As we believe it to be easier to obtain reimbursement for such services compared to diagnostic screening, this, in our view, creates an attractive market opportunity for us. Additionally, as monitoring liver cancer is generally carried out in a few specialized liver centers, we expect it would be possible to focus distribution and marketing efforts during the commercialization stage of the test.

10.5.6. Epi proLung

Our Epi proLung test was developed as an aid for the diagnosis of lung cancer and may help pathologists to confirm a diagnosis of malignant lung disease in patients with suspected lung cancer when current diagnostic procedures lead to inconclusive results. Epi proLung is designed to determine the methylation status of both the SHOX2 and PTGER4 genes in patients' blood plasma, which can be collected during a routine medical check-up. We successfully completed preliminary clinical studies for Epi proLung and obtained a CE mark at the end of 2017.

The USPSTF considers adults aged 50 to 80 years who have a certain smoking history and currently smoke or have quit within the past 15 years to be at high risk, and recommends screening for lung cancer with annual LDCT in this population (source: USPSTF Recommendation Summaries). However, LDCT scans are known to have a substantial rate of false-positive results, leading patients to require follow-up diagnostic procedures, which may be invasive (source: USPSTF Statements). We believe an accurate blood-based lung cancer test using the methylated SHOX2 biomarker and the PTGER4 biomarker, such as Epi proLung, is beneficial to patients and healthcare providers, as the detection of the methylated SHOX2 and PTGER4 could facilitate a quick and reliable diagnosis, and determine which patients would need follow-up diagnostic procedures.

As we are streamlining our development efforts and given our main focus on the commercialization of our key product, Epi proColon, we are currently not actively pursuing the further development or commercialization of Epi proLung.

10.5.7. Other Product Candidates

We have identified and protected with patents additional DNA methylation biomarkers for a variety of cancers, apart from colon and lung, including those of the prostate, bladder, gastric and head and neck. We believe these markers have the potential to form the basis for future diagnostic product development opportunities, in particular in combination with the implementation of NGS technology as the new platform we are developing with which to use our tests. Further validation through testing of clinical samples will be necessary to confirm the usefulness of these markers in clinical practice. In addition, we are also investigating biomarkers with respect to sequencing by means of various platform technologies.

10.5.8. Overview of Clinical Studies

10.5.8.1. Epi proColon

Epi proColon has been extensively studied in clinical trials enrolling more than 10,000 patients (source: Clinical Trials.gov). The results from our studies have demonstrated that Epi proColon is a safe and effective test for colorectal cancer detection and results in a greater increase in patient compliance with colorectal cancer screening when compared to fecal immunochemical tests ("**FIT**"). On April 12, 2016, the FDA granted PMA for Epi proColon for use in adults of either gender, 50 years or older, defined as average risk for colorectal cancer, who have been offered and declined tests that are available and recommended in the USPSTF 2008 colorectal cancer screening guidelines, such as fecal occult blood tests and colonoscopies. Patients with a positive Septin9 test should then be referred to a physician for a diagnostic colonoscopy. To our knowledge, Epi proColon is currently the only FDA-approved blood-based screening product for the early detection of colorectal cancer.

Epi proColon's U.S. regulatory approval by the FDA was supported by three major clinical studies, the Prospective Pivotal Study, the FIT Comparison Study and the ADMIT Study.

10.5.8.1.1. Prospective Pivotal Study (VAL0018)

In December 2011, we completed the prospective pivotal study as part of our PMA submission to the FDA. In this multi-center clinical study of Epi proColon, approximately 7,940 screening-eligible individuals, defined as persons between 50 and 75 years of age with no personal history or first-degree familial history of colorectal cancer, who were identified as "average risk" under current screening guidelines, were enrolled. The study took place at 32 clinical sites in the United States and Germany. Blood samples from all participants in the study were obtained prior to the patients undergoing screening colonoscopies and tested with Epi proColon in three different clinical laboratories.

The results from Epi proColon testing were compared to the results from colonoscopy testing in a blinded manner with a control group. The study demonstrated a test sensitivity of 68% (percentage of cancer cases present in the tested group that were correctly identified by Epi proColon) and a specificity of 80% (percentage of individuals in the group identified as negative by a colonoscopy that were correctly identified by Epi proColon).

The data in this study suggests that Epi proColon's sensitivity correlates with the stage of the cancer. In a detailed analysis the data showed that 65% of the stage I cancers present in the study group were also classified as being very small tumors. These small tumors are generally assumed to be responsible for the lower likelihood of detection, due to lower amounts of tumor DNA being shed into the bloodstream. This disproportionately high amount of small early stage tumors led to a lower than expected performance of the test in this trial. However, if the test is used regularly (for instance, annually), as these tumors are usually relatively slow growing, we believe that cancers could eventually be detected at an early enough stage, where treatment options could still result in a cure. However, at this time, such long-term repeated use testing data is not yet available. We expect that such data will be collected in the context of our FDA post-approval study (see also *10.5.8.1.5. "— FDA Post-Approval Study"*).

10.5.8.1.2. FIT Comparison Study (SPR0022)

Following the completion of the pivotal study and the presentation and discussion of the data with the FDA, we agreed to conduct a further study comparing Epi proColon to FIT. In 2012, we conducted the FIT Comparison Study, a head-to-head, multi-center comparative clinical study between Epi proColon and OC-FIT Chek, according to our estimates the market-leading FIT test.

The sample collection for the study took place at 61 clinical sites in the United States. A total of 301 patients were enrolled, including 98 cancer cases identified in screening colonoscopies and 202 prospectively enrolled subjects undergoing screening colonoscopies. In total, 101 cancer patients were included in the study, 101 patients provided a blood sample (but only 97 provided a stool sample). The study demonstrated that Epi proColon was able to detect 73% of all evaluable colorectal cancer cases (compared to 68% of colorectal cancer cases detected by FIT) at a specificity of 82%, and that the sensitivity of the blood plasma-based methylated Septin9 test is statistically non-inferior to FIT (although the specificity of the Septin9 test was lower than that of OC-FIT Chek).

The successful completion of the FIT Comparison Study allowed us to submit our PMA for Epi proColon in January 2013, which was granted in April 2016.

10.5.8.1.3. Adherence to Minimally Invasive Testing Study

We conducted the ADMIT Study after the FDA, in a June 2014 response letter to our PMA application, requested additional data to demonstrate that the blood-based Epi proColon test will increase patient compliance with colorectal cancer screening in the intended use population. As a consequence, the design of the ADMIT Study focused on subjects that have been historically non-compliant with colorectal cancer screening according to current screening guidelines.

The ADMIT study was conducted as a multi-center study at clinical centers within the Kaiser Permanente and Geisinger Health Systems. We enrolled 413 average-risk, screening-eligible patients that were historically non-compliant with current screening guidelines and had at least twice rejected or not completed an offer to be screened for colorectal cancer. The goal of the study was to demonstrate that blood-based testing with Epi proColon will result in increased patient compliance in colorectal cancer screening as compared to FIT stool-based testing.

The study was completed in May 2015 and demonstrated a 99.5% rate of adherence to colorectal cancer screening using Epi proColon, which was substantially greater than the adherence rates to FIT and other methods. Baseline adherence to standard of care colorectal cancer screening at Kaiser Permanente or Geisinger Health System amounted to less than 25%, as measured in a passive control arm of the study in which previously non-compliant patients were offered colorectal cancer screening tests (FIT or colonoscopy).

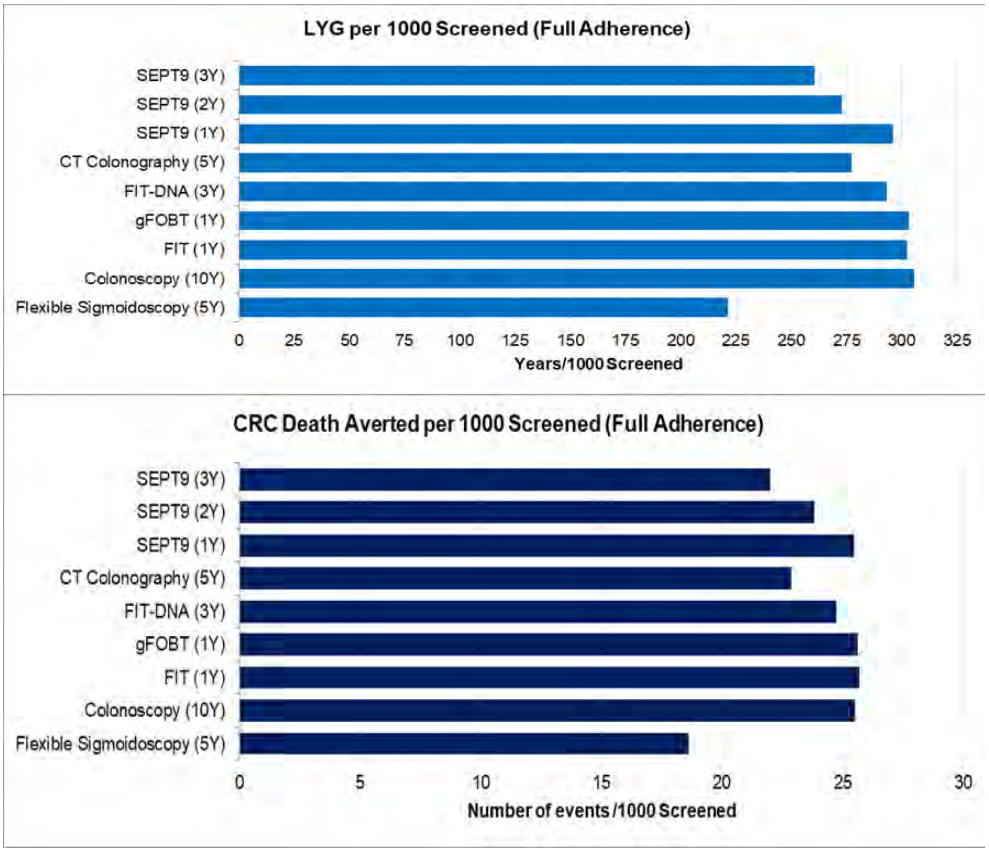
The results of these and other clinical studies have been published in peer-reviewed scientific publications, authored by their respective principal investigators. In general, in our view, it has been concluded that the detection of methylated Septin9 DNA methylation in blood plasma represents a straightforward, minimally invasive method to detect all stages of colorectal cancer, which, either alone or in combination with other screening strategies, has the potential to satisfy unmet needs for increased compliance in the target population.

10.5.8.1.4. Clinical Utility: Microsimulation & Decision Modeling Analysis

In January 2020, experts from, among other places, Harvard Medical School published a microsimulation analysis of colorectal cancer screening methods that included the Epi proColon test (the Harvard Study). Based on our observations, Microsimulation is a standard method for evaluation of CRC methods employed by the USPSTF and the ACS.

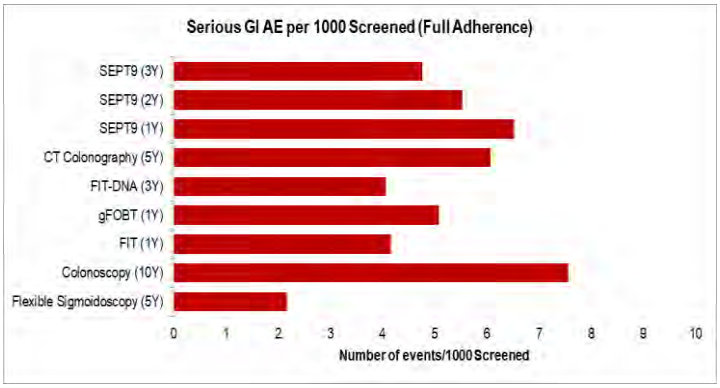
The study found that, as measured by Life Years Gained (LYG) and CRC deaths averted (reduction in mortality), annual screening with Epi proColon yields similar benefits as compared to all other CRC screening methods currently covered by CMS (Figure 1 below). Comparable outcomes were also reported for CRC cases averted (reduction in CRC incidence) using Epi proColon annually versus other methods currently covered by Medicare (source: Harvard Study).

Figure 1. Comparison of screening benefits (Life Years Gained, CRC Deaths Averted) for 9 Screening Strategies: SEPT9 (3Y), (2Y), (1Y) indicate Epi proColon testing every 3 years, every 2 years, or annually; CT Colonography (5Y) every 5 years; FIT-DNA (3Y) – Cologuard every 3 years; gFOBT (1Y) High sensitivity guaiac fecal occult blood test every year; FIT (1Y) – immunochemical fecal occult blood every year; Colonoscopy (10Y) – every 10 years; Flexible Sigmoidoscopy (5Y) – every 5 years.



As modeled in the Harvard Study, there is essentially no harm associated with the blood draw procedure for Epi proColon. However, as reported for all other CRC screening methods, harms are assessed based on the overall colonoscopy burden (lifetime number of colonoscopies required) associated with each strategy. This means that harms are measured as the overall number of colonoscopies resulting from the positivity rate (referral to colonoscopy rate) reported for any particular screening strategy. This is in line with the FDA assessment of harms for the product. The adverse event rate associated with colonoscopy (serious gastrointestinal bleeding and colon perforation) is directly proportional to the colonoscopy burden. As illustrated in Figure 2 below, the number of harms associated with the use of Epi proColon are less than those that result from using colonoscopy, as the primary screening method, every ten years.

Figure 2. Comparison of Harms for 9 Screening Strategies: Strategy Key as in Fig. 1



As evident from Figure 1, annual screening with Epi proColon provides greater benefit than screening every two or three years, though with some consequent increase in harms. Harm to benefit ratios or efficiency ratios (calculated as the incremental number of colonoscopies divided by the incremental life-years gained) are used to determine the optimal efficiency of various CRC screening strategies. On this basis, annual screening was reported as the optimal interval for CRC screening with Epi proColon.

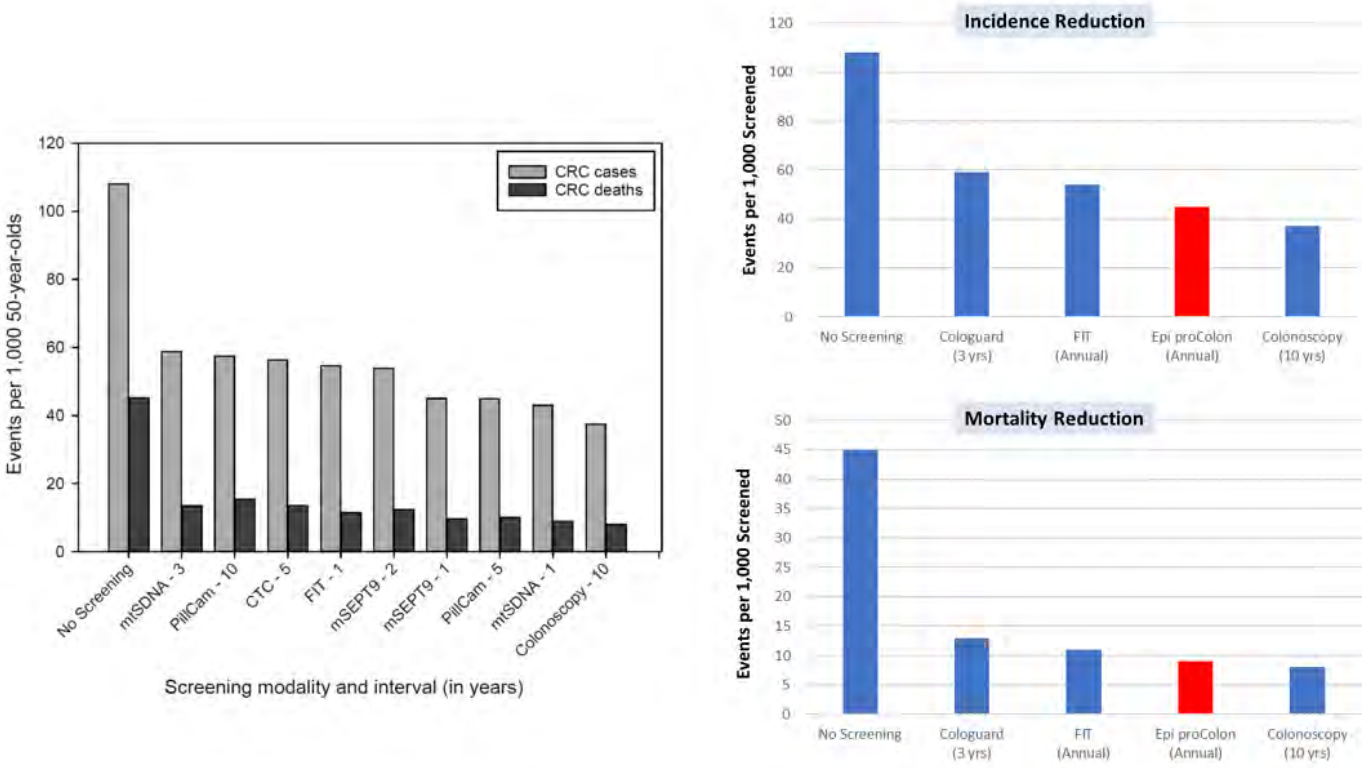
In addition, Epi proColon was subject to a model based on longstanding scientifically accepted decision modeling methods developed by CISNET, which was published in the CISNET Study in August 2020. Based on our market observation, we believe CISNET models are presently and broadly used to evaluate the long-term clinical benefits and harms associated with recommended and newly proposed screening strategies.

The development and validation of the CISNET models over the past twenty years has been sponsored by the National Cancer Institute (NCI) in an effort to provide tools for assessing the clinical effectiveness of new and innovative screening modalities. This includes determining the optimal interval for implementation of test strategies based on a prediction of the clinical outcomes of incidence and mortality reduction, along with the potential harms. For non-invasive procedures like blood tests, harms are primarily limited to those adverse events resulting from completion of the screening process via follow-up colonoscopy after a positive non-invasive test.

The CISNET models have been used by a multitude of experts, including the USPSTF and the ACS, to generate consensus statements on CRC screening recommendations (see, for example, the USPSTF Statements). These models have also served as the primary health economic analysis method for determining cost effectiveness (see, for example, the Harvard Study). CMS has also recognized the utility of these models and in fact has co-authored CISNET studies and/or commissioned this group to perform microsimulation analysis for new CRC screening methods (see, for example, the Cost-Savings Study or the Cost-Effectiveness Study).

The CISNET Study demonstrated that Epi proColon led to greater clinical benefit than alternative diagnostical methods used for the detection of CRC, *i.e.*, FIT and Cologuard (a multitargeted stool DNA test). According to the model, annual screening with Epi proColon results in 4% fewer CRC deaths and 8% fewer CRC cases than annual screening with FIT, as well as 9% fewer CRC deaths and 13% fewer CRC cases than triennial screening with Cologuard. Most importantly, the modeling showed that Epi proColon results in approximately 80% fewer CRC deaths and nearly 60% fewer CRC cases when compared to no screening.

Figure 3. CISNET Study found that Epi proColon achieves greater reductions in mortality and incidence than Cologuard or FIT



The CISNET Study also analyzed harms for Epi proColon and compared them to other methods. The only harms associated with non-invasive screening methods (blood- and stool-based tests) are the adverse events ("**AEs**") resulting from the colonoscopy burden associated with each method. This means that the total number of colonoscopies associated with each screening modality over a lifetime of screening is used as a proxy for the harms and burden of screening. The AEs associated with colonoscopy can include serious gastrointestinal events such as perforations, gastrointestinal bleeding or transfusions, and other gastrointestinal events such as paralytic ileus, nausea, vomiting, dehydration, and abdominal pain. Cardiovascular events may include myocardial infarction or angina, arrhythmias, congestive heart failure, cardiac or respiratory arrest, syncope, hypotension, or shock.

According to the CISNET Study, Epi proColon results in nearly 20% fewer harms (colonoscopy burden) than the gold standard method of CRC screening, which is to screen using colonoscopy alone at a ten-year interval. The harms to benefit ratio (*i.e.*, colonoscopies required per quality-adjusted life-years gained, or "**QALYG**") for Epi proColon as compared to no screening was 19. The same ratio for the gold-standard method as compared to no screening was 22. That is, using colonoscopy once every ten years as the gold standard CRC screening method, the medical community has determined that 22 colonoscopies per QALYG is an acceptable ratio. Epi proColon requires only 19 colonoscopies per QALYG, which is favorable to the threshold of 22 set by the gold standard.

According to the CISNET Study, the serious AE rates statistically overlap between all methods: Similarly, the overall AE rates statistically overlap between all non-invasive methods analyzed. Epi proColon demonstrates a nearly 20% decrease in AE rate over a lifetime of screening as compared to the current standard (colonoscopy every ten years). Despite the higher AE rates for colonoscopy, it remains the current standard because it yields the greatest benefit over the other methods. In the

same manner, the AE rates associated with Epi proColon are not statistically different from those of FIT and Cologuard, yet Epi proColon yields greater benefits.

The CISNET Study also concluded that Epi proColon was more cost-effective than Cologuard (a CRC screening method already approved for coverage by CMS). As regards the optimal testing interval, according to the CISNET analysis, annual Epi proColon testing was the optimal choice for CRC screening. Annual testing maximizes the benefits of Epi proColon. When comparing the efficiency ratio between annual and biennial Epi proColon, administering the test annually yields 19 additional QALYG and results in 626 additional colonoscopies. Therefore, the efficiency ratio between annual and biennial Epi proColon is 33 (626/19) and favors annual over biennial testing.

10.5.8.1.5. FDA Post-Approval Study

As part of the FDA's PMA approval process of Epi proColon, we are required to conduct a post-approval study for Epi proColon. We commenced this study in the fourth quarter of 2016, planning for completion in 2022. We currently expect to enroll 4,500 patients across multiple study centers in the United States. As of December 2020, we have enrolled approximately 55% of the target number of subjects. In 2020, all study sites were required to limit or postpone research study activities because of COVID-19. As a result, new enrollment has been significantly reduced and study visits delayed. We project a measured return to pre-pandemic study activity and therefore anticipate approximately a one-year delay in overall completion (subject to further waves of COVID-19).

The post-approval study is intended to establish the programmatic performance of our Epi proColon test. In addition, the study intends to provide data on patients' adherence to follow-up colorectal cancer testing upon receiving a positive result from Epi proColon and the compliance rate for continued participation in colorectal cancer screening programs that use Epi proColon as a screening option. The study is designed to assess the impact of annual colorectal cancer testing using Epi proColon for people who are eligible for colorectal cancer screening but have declined screening by methods recommended by the USPSTF, such as a colonoscopy or a fecal occult blood test, a method that uses stool samples as a basis for the test. In accordance with FDA requirements, we have submitted the complete protocol of our post-approval study to the FDA and provide annual interim reports to the FDA.

10.5.8.1.6. VA Manhattan Study

In October 2018, we announced the start of a study carried out by the Veterans Administration New York Harbor Healthcare System (VA Manhattan), which consists of a group of hospitals, for participation in a colorectal cancer screening with Epi proColon. The study examines patients who have rejected both a colonoscopy and a FIT, with the objective to evaluate the potential of a blood-based test as an acceptable alternative for patients resistant to screening. We have provided Epi proColon test kits and financial support for the study. The completion of this study was also affected by COVID-19. However, we anticipate publication of the results as an abstract at a scientific conference in the second quarter of 2021 (subject to further delays due to COVID-19).

10.5.8.2. Epi proColon 2.0 CE Studies

The clinical performance of Epi proColon 2.0 CE was determined using 149 clinical samples with no evidence of disease selected from a group of average risk screening population and using 197 clinical specimens in a case-control design comprised of samples from histologically confirmed colorectal carcinoma patients of all stages and samples from colonoscopy-verified negative individuals with no evidence of disease.

In the average-risk group, one out of 149 samples provided a positive test result. Accordingly, the estimated false positive rate in this group of patients was 1%. These numbers translate into a clinical

specificity (percentage of individuals in the group identified as negative by a colonoscopy that were correctly identified by Epi proColon 2.0 CE) of 99%. Within the 99 subjects from the control group with no evidence of disease (controls), 96 specimens were determined to be Septin9 negative, resulting in an estimated clinical specificity of 97%.

Of the 98 subjects diagnosed with colorectal carcinoma, 79 specimens were determined to be Septin9 positive resulting in an estimated clinical sensitivity (percentage of cancer cases present in the tested group that were correctly identified by Epi proColon 2.0 CE) of 81%. In early, localized colorectal cancer the Epi proColon 2.0 CE test was positive in 43 (18 stage I, 25 stage II) of the 56 patients (77%).

10.5.8.3. HCCBloodTest Studies

In April 2018, two independent clinical studies conducted in France and Germany, which examined blood from cirrhotic patients with and without HCC, found that among patients with cirrhosis, the methylated Septin9 test constitutes a promising circulating epigenetic biomarker for HCC diagnosis at the individual patient level. These results indicate that methylated Septin9 exhibits higher diagnostic accuracy for HCC detection than other currently available standard of care surveillance methods including the use of AFP. The two clinical studies included 289 cirrhosis patients with or without liver cancer from France (initial study) and Germany (replication study). Among other things, the studies demonstrated that a triple-negative test on methylated Septin9 had the highest negative predictive value for excluding liver cancer (97%), whereas a triple-positive methylated Septin9 test had the highest positive predictive value for retaining a diagnosis of liver cancer (92%) (source: mSEPT9 Research Paper).

Based on these results, we obtained CE marking for HCCBloodTest in Europe in October 2018 and conducted a cross-sectional study on cirrhotic subjects in the United States in 2019. We have tested Septin9 alone and with other methylation markers to assess the clinical performance of at least two versions of the test in a U.S. population. The results of this study have recently been published in a scientific journal (source: BMC Gastroenterology). We plan to initiate larger prospective trials in the United States in the future. We also plan to sponsor a large longitudinal study in Europe consisting of approximately 440 patients to ascertain the diagnostic performance of the assay in a clinical setting.

10.5.8.4. Epi proLung Study

We have developed and CE marked a proprietary blood-based Epi proLung test. In late 2015, in a first feasibility study to evaluate the viability of a blood plasma-based lung cancer test, we explored the performance of some of our proprietary DNA methylation biomarkers, including the SHOX2 and PTGER4 genes. Levels of DNA methylation were analyzed in two independent case-control sets of plasma samples. The training set of 30 plasma samples and the larger testing study of 151 plasma samples included all major histological types and covered a broad range of lung cancer stages. The DNA methylation panel displayed high sensitivity in detecting lung cancer. The findings observed in the training study were confirmed in the testing study.

10.6. Our Commercialization Strategy for Epi proColon

Depending on the structure of the market we want to target and our knowledge of that market's requirements, we pursue different commercialization strategies for our commercial-stage product Epi proColon.

10.6.1. United States

The U.S. market is our primary focus geographically, as it remains the most attractive market for us worldwide (see *9.3.1. "Markets and Competitive Environment — Cancer Diagnostics Markets by Geography — The Cancer Diagnostics Market in the United States"*). With an estimated target market of approximately 30 million patients who have not been screened for CRC despite existing guideline recommendations (based on U.S. Census data and assuming a non-adherence rate to screening in accordance with current guidelines of approximately one third, which we estimated based on ACS Colorectal Cancer Facts and Figures 2020-2022), the U.S. market offers an opportunity to grow test volumes for Epi proColon, increase revenue and introduce additional products to the market.

Since FDA approval of Epi proColon was granted in April 2016, we have made progress in achieving U.S.-wide availability of Epi proColon, which is needed to increase acceptance and awareness of the product. Four of the top national reference laboratories in the United States are now offering Septin9 testing. On May 9, 2016, Laboratory Corporation of America Holdings, Burlington, North Carolina, United States ("**LabCorp**"), the world's leading healthcare diagnostics company (source: LabCorp Company Website), became the first laboratory network in the United States to offer Epi proColon, and it was followed by ARUP Laboratories, Inc., Salt Lake City, Utah, United States. We continue to focus on laboratory adoption by those laboratories that have not yet adopted Epi proColon. In this regard, we aim to leverage our Epi proColon test by offering automation solutions for Epi proColon processing to our Laboratory Customers. Our R&D team has developed a pipetting-robot platform, which makes it possible to automate the processing of 48 or 96 plasma samples in parallel through robots, which we believe improves precision and may increase processing speed of the tests up to sixfold.

To promote Epi proColon sales in the United States, in 2018, we entered into the Sales Partnership Agreement with Polymedco, pursuant to which Polymedco acts as an exclusive sales and marketing agent for Epi proColon. We are permitted to continue to distribute Epi proColon ourselves, however, any commercial sales incur commission fees payable to Polymedco and count towards Polymedco's minimum sales requirement under the agreement. For details, see *11.3. "Material Agreements — Sales Partnership Agreement with Polymedco"*.

We, together with Polymedco, target Laboratory Customers that have a significant outpatient business and an established sales force to sell their test offerings. These Laboratory Customers perform PCR assays as part of their offered services. The experienced sales teams of our Laboratory Customers negotiate with the healthcare providers that generate screening assay volumes, while their reimbursement and billing departments negotiate arrangements and collect payments from third-party payors, including government programs such as Medicare and Medicaid, private insurance plans and managed care programs. We believe that involving the molecular diagnostics Laboratory Customers in the United States and leveraging the sales and marketing efforts of these Laboratory Customers will help ensure rapid and broad commercial adoption of Epi proColon testing. In addition, we work with key medical opinion leaders in order to increase the adoption of our test across healthcare providers and ensure its favorable recommendation in the CRC screening guidelines issued by leading medical societies.

10.6.2. Europe

The European market for IVD products is highly fragmented. Further, in most European countries, colorectal cancer screening is organized on a governmental level and the barriers to entry into such systems are typically very high, whereas self-payer segments are small and costly to service (see *9.3.2. "Markets and Competitive Environment — Cancer Diagnostics Markets by Geography — The*

Cancer Diagnostics Market in Europe"). Therefore, for the time being, we have a very limited focus on the European commercialization of Epi proColon. The test is sold, as Epi proColon 2.0 CE, in Germany, Austria and Switzerland, Spain, France, Luxembourg, Turkey, Estonia, the Czech Republic, Slovakia, and Romania.

10.6.3. Other International Markets

Outside the United States and Europe, we only sell Epi proColon (in certain countries as Epi proColon 2.0 CE) in very few select international markets. There are other attractive markets for the commercialization of our product. However, since we are not directly present in most of these markets, most notably in a number of Asian countries, in Kuwait and Bahrain, Australia and New Zealand, Canada and Mexico, we seek to address these markets through various partnerships with locally active companies specializing in the commercialization of IVD products in their respective home markets. So far, such partnerships have only accounted for an immaterial portion of our revenues. We expect to continue to analyze the potential introduction of our HCCBloodTest in other international markets in the future.

With respect to China in particular, after we had initially entered into the BioChain License Agreement (see *11.4.1. "Material Agreements — License Agreements — BioChain License Agreement"*), an exclusive patent licensing agreement pursuant to which BioChain marketed and sold their own version of our product in China and paid us royalties on our patents, we terminated such agreement because BioChain did not meet certain minimum sales requirements. In addition, following a request for invalidation by Jiangsu Weizhen Biomedical Technology, Inc. ("**Weizhen**"), on July 15, 2019, the Reexamination and Invalidation Department of the China National Intellectual Property Administration ("**CNIPA**") deemed our Septin9 patent in China partially invalid. Pursuant to the decision, our Epi proColon 2.0 CE product, as well as HCCBloodTest, are no longer patent-protected in China. The decision is not yet legally effective and we filed an appeal on October 10, 2019, but expect reversal of the decision to take several years (if ever). In light of this situation, we have decided to discontinue our efforts to commercialize Epi proColon in China for the foreseeable future.

10.7. Epi proColon Medicare Reimbursement

In the United States, Epi proColon is marketed to Laboratory Customers that currently perform molecular diagnostic testing in an outpatient setting throughout the United States. These Laboratory Customers generate revenue by testing patient samples and then billing the patient or, more commonly, their insurers, for this service. In general, these Laboratory Customers have a dedicated billing department to ensure timely and appropriate payment. Their ability to collect payments from healthcare payors will determine the demand from these Laboratory Customers for our product. Therefore, the ability of the Laboratory Customers that perform our test to receive reimbursement is very important to our commercial success.

For the methylated Septin9 test, the U.S. Laboratory Customers bill private insurance companies and government intermediaries known as Medicare Administrative Contractors ("**MACs**") for their testing with Epi proColon, depending on the age of the patient. With respect to the methylated Septin9 test, which is appropriate for patients aged 50 to 75, private insurance companies and private payors are billed for the testing of patients under the age of 65, and the MACs and Medicare Advantage Plans (private insurance plans that contract with Medicare) are billed for the testing of patients over the age of 65. Therefore, decisions such as NCDs by CMS and reimbursement rate decisions have a significant impact on the revenue that our Laboratory Customers are able to generate by performing the test. Medicare reimbursement is particularly crucial in this regard, since typically the Medicare reimbursement status and rate set the industry benchmark that is also

adopted by private payors (*i.e.*, private insurance companies). Large-scale commercial adoption in the United States is thus highly dependent upon achievement of reimbursement, specifically, Medicare reimbursement. While Medicare reimbursement for Epi proColon on the U.S. market remains our most significant milestone yet to be achieved, we aim to continue to strive for favorable reimbursement decisions by other third-party payors.

In Europe, most health care payors are not prepared to cover the expenses of screening products or have protracted and time-consuming decision-making processes in place to make reimbursement decisions. Furthermore, these decisions are taken on a country-by-country basis. Therefore, we have decided not to actively pursue the reimbursement of Epi proColon 2.0 CE in European markets at this time.

In the United States, the two critical factors for Medicare reimbursement are rate and coverage.

10.7.1. Medicare Rate

The amount our Laboratory Customers will be paid by third-party payors for executing the test and producing a result for each patient is referred to as the reimbursement rate, and it depends on the Current Procedural Terminology ("**CPT**") codes (national billing codes) of each product. Laboratory Customers submit invoices citing a specific CPT code for each test performed in the laboratory to the respective healthcare payors. CMS establishes the Medicare reimbursement rate for individual tests that are covered by the CPT, considering the combination of supply cost and labor. While private payors make their own decisions regarding payment levels, such Medicare rate is considered the industry benchmark for such rates and, based on our market observation, typically adopted by private payors (*i.e.*, private insurance companies) within a range of 80% - 120%.

As Epi proColon had not yet received a CPT code, in late 2016, it was "crosswalked" to an existing CPT code, meaning CMS considered the Epi proColon similar to other products classified under this code, which received a rate of USD 83.67, despite Epigenomics, CMS' expert panel and numerous industry groups recommending a rate of approximately USD 160.00 per test. After we filed for reconsideration, in June 2018, CMS issued the preliminary gapfill rate of USD 192.00 for Septin9 (Epi proColon). On October 22, 2018, CMS announced the final reimbursement rate of USD 192.00 per Epi proColon test. On December 14, 2018, CMS published the official Clinical Lab Fee Schedule for 2019, which includes this same rate as the final reimbursement rate with effect from January 1, 2019.

Under the U.S. Protecting Access to Medicare Act ("**PAMA**"), Medicare reimbursement rates are subject to regular re-evaluation and may be fixed at a substantially lower level than the initial rate of, *e.g.*, USD 192.00 for Epi proColon. However, under PAMA, there is a cap limiting any reduction to between 0% and 15% per year. For instance, there is a 0% reduction cap (*i.e.*, there will be no reduction based on PAMA) for 2021, and Medicare reimbursement may not be reduced by more than 15% for 2022 through 2024.

10.7.2. Medicare Coverage

There are two ways to achieve Medicare coverage for a preventive service such as our Epi proColon test: (i) an NCD by CMS or (ii) legislation.

With regard to an NCD, in April 2019, we filed a formal request with CMS. At that time, however, CMS stated that it would not be able to begin the NCD review process right away due to limited staff resources. On February 28, 2020, CMS finally accepted our application for review of an NCD of Epi proColon and started the necessary review process with a 30-day public comment period. By statute, CMS would then have had to announce a proposed decision within six months and a final reimbursement decision within another 90 days. However, CMS did not meet the deadlines and a

proposed decision was not published until October 16, 2020. In its proposed decision, CMS stated that, among other things, in order to be eligible for Medicare coverage, a blood-based biomarker CRC screening test must be included as a recommended routine colorectal cancer screening test in at least one professional society guideline or consensus statement or USPSTF recommendation. In addition, certain test performance characteristics where laid out in the proposed decision by CMS. Our Epi proColon test did not meet both of the above-mentioned criteria and, hence, the proposed decision was not to cover it.

We disagreed with the proposed decision as it did not take into account important scientific data and (simulation) study results that we had submitted along with the application or had become available after we submitted our initial request (for example, the Harvard Study and the CISNET Study). We found this particularly surprising because, according to our observations, leading medical societies responsible for drafting the relevant screening guidelines in the United States (such as the ACS or the USPSTF) rely on the results of such simulation studies when drafting their guidelines.

In the second 30-day public comment period following the proposed decision, third parties, such as medical experts, physicians, laboratory physicians, as well as the ACS criticized both CMS's approach and the proposed decision (source: Public Comments in the MCD).

Nevertheless, on January 19, 2021, CMS denied our formal request for coverage of Epi proColon under Medicare as part of the NCD for screening for colorectal cancer with blood-based biomarker tests. The decision largely followed the proposed decision issued on October 16, 2020 with the exception that CMS dropped the requirement for guideline inclusion. In the final decision, CMS stated that, among other things, blood-based biomarker screening tests, such as Epi proColon, must have both a sensitivity greater than or equal to 74% and a specificity greater than or equal to 90% in the detection of colorectal cancer compared to the recognized standard (*i.e.*, colonoscopy at the time of the decision). According to CMS, if these levels of sensitivity and specificity are met by a new screening test and, hence, such test is at least as good as the sensitivity of a FIT and the specificity of a stool DNA test, this would constitute indirect evidence that such test may reduce colorectal cancer mortality. However, CMS stated in its decision that the reviewed studies show the sensitivity of the Epi proColon test to be no better than FIT in detection of colorectal cancer. According to CMS, compared to the FIT test, the specificity for Epi proColon is lower and the reviewed studies do not demonstrate that using Epi proColon prevents more cancers or improves survival for Medicare patients. Therefore, CMS concluded that the Epi proColon test performance does not meet sensitivity and specificity levels established by prior evidence at which the benefits of using the screening test outweigh harms to Medicare patients, and, thus, CMS denied Medicare coverage for Epi proColon.

We believe that the decision by CMS is wrong. Together with several professional societies such as ACS, which raised its concerns during the public comment period for the NCD (source: Public Comments in the MCD), we consider the performance criteria set forth in the NCD to be arbitrary and in conflict with scientific evidence. We are therefore currently evaluating options regarding the negative NCD.

For instance, it is possible to ask CMS to reconsider our request for an NCD. However, CMS in general only reconsiders its determination in case new data are presented. Besides we have not identified any direct actions we may take against the NCD. However, there is an option to support an aggrieved third party like, for example, a Medicare beneficiary whose physician has prescribed the Epi proColon test or whose reimbursement request for his individual Epi proColon test has been denied, in contesting the NCD. Unlike us, such an aggrieved third party may file an appeal to have the NCD reviewed by the competent DAB. In this case, we may request with DAB to get involved into the process whereby it is DAB's discretionary decision whether and in what manner such

participation is granted. Although we would not formally become a party to the review proceedings, this would give us certain limited capabilities to influence the outcome of the proceedings, for example, by providing legal submissions and offer an alternative or additional perspective. We estimate that such an appeal could take at least six to twelve months and would cost a medium six-digit amount or more. If DAB rejects such an appeal that decision may ultimately be challenged in court, which could takes at least another six to twelve months and would result in additional costs amounting to a medium six-digit amount or more according to our estimate. In any event, there can be absolutely no guarantee that the NCD might be successfully overturned by any such proceedings and, in contrast, there are only few precedents where an aggrieved party was successful in overturning a negative NCD by any such proceedings.

We are currently evaluating all of the above-mentioned options and, as part of this process, plan to meet with CMS' leadership in the next months which has been newly appointed since the negative reimbursement decision.

As an alternative to an NCD, Medicare coverage for Epi proColon could also be achieved through legislation of U.S. Congress. While a bipartisan bill was previously introduced in the U.S. House of Representatives which, if adopted, would have mandated Medicare coverage for FDA-approved blood tests for colorectal cancer screening, such proposed bill has expired with the beginning of the new legislative term in early 2021. However, on March 8, 2021, a bill was introduced in the U.S. House to amend the Social Security Act to provide Medicare coverage for FDA-approved qualifying CRC screening blood-based tests to, according to such bill, increase participation in CRC screening in under-screened communities of color and to offset the COVID-19 driven declines in CRC screening. On the same day, the bill was referred to the Committee on Energy and Commerce and in addition to the Committee on Ways and Means, in each case for consideration of such provisions as fall within the jurisdiction of the respective committee. More recently, in June 2021, an identical bipartisan bill was introduced in the U.S. Senate which if adopted in its current form would, among others, mandate Medicare coverage for FDA-approved blood tests for colorectal cancer screening. In addition, we are attempting to use the new U.S. administration's health initiatives to support our course by focusing on "racial discrimination" and the negative impact of COVID-19 on screening rates in communities of color. Nevertheless, the timing and success of such legislation remains highly uncertain, including due to political unpredictability and policy considerations.

10.8. Inclusion of Epi proColon in Medical Guidelines

Incorporating a new diagnostic test into medical guidelines is an important step for any new screening product, given the influence guidelines have on physicians. Medical guidelines are developed by professional medical associations for the reference and guidance of healthcare providers, in order to assist them in making decisions regarding the diagnosis and treatment of diseases at various stages.

Current medical guidelines for colorectal cancer screening have developed from three main sources: (i) ACS, a U.S. nationwide, community-based voluntary health organization dedicated to eliminating cancer as a major health problem by preventing cancer, contributing to the treatment of cancer and diminishing suffering from cancer, through research, education, advocacy, and service; (ii) medical professional societies committed to screening and care standards within the gastrointestinal field such as the American Gastroenterology Association, the American College of Gastroenterology, and the American Society of Gastroenterological Endoscopy; and (iii) the USPSTF.

We are working with different professional societies and associations that issue guidelines on colorectal screening in an attempt to include blood-based Septin9 testing on the list of recommended screening methods. The timing for the inclusion of Epi proColon in screening guidelines depends on

how frequently each group updates its guidelines, which can be anywhere from annually to every five years, and on the outcome of the medical or technical assessment of the medical experts seated on the committees that take decisions for such guideline bodies.

Contrary to our expectations, Epi proColon was not included in the updated ACS CRC screening guidelines published on May 30, 2018. We believe that this was at least in part due to the fact that our tests and technology are relatively new and there were no microsimulation models on its benefits, which we believe are taken into account in the development of screening guidelines. With the publication of two microsimulation models since, we believe Epi proColon is positioned favorably for future ACS guideline inclusion.

In April 2020, NCCN included Epi proColon in their guidelines. Specifically, NCCN stated that "mSEPT9 is not recommended for routine screening but can be considered for patients who refuse other screening modalities." This inclusion is in line with the FDA label for Epi proColon.

In October 2020, USPSTF issued draft updated guidelines. Epi proColon was excluded from the analysis in those draft guidelines based upon its FDA label (patients who decline other methods). During the public comment period, we requested for Epi proColon to be included in the analysis. Based upon the published microsimulation model, we believe that Epi proColon, if included in the analysis, should demonstrate better morality reduction than FIT and Cologuard. The final USPSTF guidelines are expected in 2021.

In the European Union, medical guidelines are issued, but not binding and not followed consistently by all European countries. Guidelines prepared on a national level result in a different approach regarding the diagnosis and treatment of colorectal cancer throughout the European Union. Due to the complicated and different methods of issuing guidelines in Europe, we consider it unlikely that Septin9 tests will be included in any guideline within the next five to ten years. Once the product is further developed, however, we will strive to obtain guideline inclusion this, as well as for future products and product candidates.

10.9. Manufacturing Relationships

In addition to our commercial partnerships for the development and commercialization of our products and product candidates, we also engage a contract manufacturer to produce our products and product components. We believe such outsourcing of production allows us to reduce our production costs by avoiding a costly setup of our own production sites and the maintenance of such facilities and qualified staff necessary to meet required U.S. current good manufacturing practice ("**cGMP**"), as laid out in the FDA's Quality System Regulation, 21 CFR Part 820.

In particular, in October 2015, we entered into a global manufacturing services agreement for our Epi proColon product with Sentinel CH SpA, Milan, Italy ("**Sentinel**"), a company mainly focusing on the development and production of diagnostic kits. Under the terms of the agreement, Sentinel manufactures the Epi proColon test kit on a price-per-kit basis for worldwide markets in accordance with the International Organization for Standardization ("**ISO**") standard 13485 ("**ISO 13485**") and 21 CFR Part 820 requirements. Sentinel manufactures the kits at its facility in Milan, Italy. The site has successfully passed FDA inspection and is approved to manufacture the Epi proColon product for the U.S. market. The facility in Milan is suited to manufacture large volumes using, *e.g.*, automated filling and labeling processes.

In connection with COVID-19, we analyzed our supply chain with regard to risks from the pandemic and took certain measures. For instance, the storage of our finished products was supplemented by an alternative storage location in order to remain able to deliver in case of quarantine for one location.

10.10. Research and Development

Our research and development efforts are focused on enhancing existing tests and developing new diagnostic tests that use our proprietary DNA methylation biomarkers. Our research and development team also has the expertise necessary to set and maintain relevant standards for regulatory evaluation regimes and complex clinical documentation required to bring these products to market. These standards also apply when meeting ongoing regulatory requirements after approval. We began as a pioneer in DNA methylation, exploiting this natural phenomenon through our proprietary technologies as a rich source of biomarkers. Today, we focus on developing molecular diagnostic products for cancer and bringing them to markets in highly regulated environments.

The development of IVD products requires an in-depth understanding of the stringent regulatory standards and extensive clinical documentation requirements for the introduction and maintenance of these products on the market. In our view, we have developed this skill-set within our Company and have proven our ability to effectively apply this knowledge in the development of IVD products based on our proprietary technology, which according to our estimate few companies of our size have. We have also successfully developed products for other emerging companies on a service basis, thus validating the unique nature of our know-how in this area.

We have assembled an experienced research and development team with the scientific, engineering, biostatistics, regulatory, quality assurance, and process talent that we believe is required to successfully grow our business. As of June 30, 2021, there were 16 employees (headcount) engaged in research, product development, IP, regulatory affairs, quality assurance and manufacturing.

We have started an FDA post-approval study for Epi proColon, which is intended to establish the long-term, repeat performance of the test for detecting the colorectal cancer biomarker Septin9. In addition, the FDA post-approval study is intended to establish data regarding patients' adherence to follow-up with a colonoscopy upon receiving a positive result from the Epi proColon test and the compliance rate for continued participation in colorectal cancer screening programs that use Epi proColon as a screening option.

We intend to continue improving our Epi proColon test, with a particular focus on developing automated versions that should enable more Laboratory Customers to run the test in a cost-effective manner. In this regard, we completed the development of an automated process for labor-intensive portions relating to the production of bisulfate converted DNA in June 2018, see also *10.5.4. "— Our Products and Product Candidates — Epi BiSKit and Automation Solution"*). The automated methods have been developed on an automated Tecan liquid handling robot and are available for research purposes only at this time. Details of these methods have been published in scientific journals.

In 2016, we also began with the implementation of targeted bisulfite NGS technology, which enables the user to analyze one patient sample with multiple biomarkers at the same time. The technology is established in most molecular diagnostics laboratories where initially tissue samples were used for analysis, and it has gradually been extended into liquid biopsy samples including blood plasma and urine. We are exploring various liquid biopsy products via NGS based on our own proprietary biomarkers, and have completed the first proof-of-concept studies for this technology. We believe NGS technology offers promising potential for the development of new and improved cancer tests, in particular for colon and lung cancer, and also for generating valuable clinical data that could be used to develop tests for other types of cancer, such as liver, bladder and prostate cancer. We therefore expect NGS to be a focus of our research and development efforts in the future. We have achieved a number of key milestones in our NGS research program:

- We have developed a prototype CRC/liver cancer panel consisting of multiple methylation and single nucleotide polymorphism biomarkers which is ready for further validation on clinical samples. We are looking to use this approach to distinguish CRC from inflammatory diseases of the gut and potentially HCC from liver cirrhosis and liver cirrhosis itself;
- We have developed a prototype multiplexed-comprehensive NGS panel consisting of 56 markers, which we plan to partner with other collaborators for further development;
- A sensitive panel for the detection of bladder/prostate/kidney cancer from urine is also under development; and
- We have preliminary data on head and neck cancer markers that, with further testing and optimization, may add to our existing IP portfolio in the near future.

Another focus of our research and development efforts is the further development of our key product candidate, Epi proColon Next-Gen, which is a yet more advanced version of our CRC screening blood test. This new, multi-target real-time PCR blood test, is based on the same method as our existing Epi proColon test but uses a new proprietary core DNA methylation technology. We believe the automated assay is highly robust, providing valid results for greater than 99% of samples analyzed, and provides a fast, easy-to-use and affordable option for detecting CRC using a blood sample. Based on our interpretation of early clinical data for the test, we believe this product candidate or a modified version thereof may potentially be eligible for Medicare coverage in the future (see also *10.5.3. "— Our Products and Product Candidates — Epi proColon Next-Gen"*).

In addition to these initiatives, we constantly review and evaluate various other product opportunities focused on maximizing the value of our validated biomarkers for further clinical applications.

We manage our research and development expenditures on a global basis and, as a general matter, do not break down research and development expenditures by project. Further, the majority of the research we conduct applies to all or multiple of our projects rather than specific projects.

10.11. Quality Management

With respect to our current products and product candidates, as well as our research and development efforts, we operate under a quality management system certified according to ISO 13485 for the design, development, manufacturing and distribution of IVD products. ISO 13485 is an internationally recognized quality management standard developed for medical devices and diagnostics by the ISO and we passed our ISO 13485 inspection in May 2019 without any major findings. Our quality management system is also designed to comply with U.S. cGMP, as laid out in 21 CFR Part 820. Both 21 CFR Part 820 and ISO 13485 specify requirements for quality management systems that are meant to demonstrate an organization's ability to provide medical devices and diagnostics that consistently meet customer and applicable regulatory requirements. We believe our implementation of such a system demonstrates our ongoing commitment to developing safe and effective diagnostic products.

10.12. Intellectual Property

Our success depends in part on our ability to obtain and maintain proprietary protection for our products and product candidates, technology and know-how, to operate without infringing the proprietary rights of others and to prevent others from infringing our proprietary rights (see *1.3.1. "Risk Factors — Risks Related to Intellectual Property — Our success depends on obtaining, maintaining and enforcing patents and other intellectual property rights relating to our technologies, products and product candidates. If we are unable to protect such intellectual property rights, we*

may not be able to compete effectively as, for example, we could lose our ability to prevent others from utilizing our technologies or commercializing products similar or identical to ours without payment to us.").

We seek to protect our proprietary position, among other methods and where patent protection is available, by maintaining our issued patents and filing and defending new world-wide patent applications related to our proprietary technology, inventions and improvements that are important to the development of our business. This should provide us with national patent protection in the United States, European countries participating in the European Patent Convention ("**EPC**"), China and other jurisdictions. Since, over recent years, we have moved our business from only developing new products to also marketing and selling our existing products, patent protection is now even more important to prevent competitors from launching competitive products based on our biomarkers. To this end, we have conducted extensive freedom-to-operate analyses, including for the U.S. version of our Epi proColon product, and we consider the results of such analyses thus far to have been satisfactory. As a precautionary measure, we continuously monitor the status of patent applications deemed to be relevant to our business and consult our IP lawyers with the aim of achieving the best possible protection of our IP rights. We also rely upon trade secrets, know-how, continuing technological innovation and in-licensing opportunities to develop and maintain our proprietary position.

10.12.1. Owned and Licensed Patents

Our business relies heavily on our owned or licensed patents and patent applications. Therefore, any adverse changes to the scope or term of our patent rights, the geographic scope of our patent protection, and our ability to enforce our patent rights and prevent others from infringing our intellectual property would negatively impact our business, including our competitive position, as well as our ability to commercialize our products and enter into collaborations or other arrangements with third parties. Our revenue, earnings and overall commercial success depend on the successful protection of our intellectual property. In addition, pursuant to the German Act on Employees' Inventions (*Arbeitnehmererfindergesetz*), ownership or co-ownership in certain of our patents and patent applications we depend upon could be challenged by employee inventors. If such challenges were to be successful, we may lose valuable intellectual property rights and may be required to provide additional compensation to such employee inventors, which could have a material adverse effect on our business. For further discussion of the risks relating to our intellectual property position (see *1.3. "Risk Factors — Risks Related to Intellectual Property*" and *12.2.6. "Regulation — Regulatory Framework for our Operations and Products in the European Union and Germany and Other International Laws — German Employee Inventor's Act").*

We maintain a patent portfolio with 37 owned patent families and one non-exclusively in-licensed patent family (all data in this section as of June 30, 2021). Summarized below are the patent rights relating to Methylation Analysis and PCR Analysis Technology, Epi proColon, HCCBloodTest and Epi proLung, which cover three biomarkers. In addition to the three core biomarkers used in these products, we have an additional pipeline of 31 proprietary biomarkers. Eleven of these biomarkers or the use thereof regarding diagnostic assays are protected by 96 issued patents and 27 of these biomarkers or the use thereof regarding diagnostic assays are claimed in seven pending patent applications including three for diagnostic multi-marker panels for colorectal cancer, liver cancer, and head and neck cancer, which were filed in 2019 and 2020 and are based on larger sets of known and novel markers that were assessed with NGS.

We hold and maintain 33 issued national patents in Germany. Furthermore, we have filed three additional European patent applications that will be nationalized, when granted, *inter alia*, in Germany.

Note that all intellectual property and trademark-related data referred to in this section and the following sub-sections is reported to the Company as of June 30, 2021 if not indicated otherwise and, in case of patent term extensions, expiry dates for U.S. patents were calculated using the MS-Excel Patent Term Calculator as available from the United States Patent and Trademark Office (the "**USPTO**").

10.12.1.1. Methylation Analysis of Septin9 Gene

Our patent portfolio relating to our methods for analyzing methylation of the Septin9 gene includes five distinct patent families that we own.

The first of these patent families relates to our methods, kits and composition of matter for methylation analysis of Septin9 by bisulfite analysis. The patent family includes one issued patent in the United States scheduled to expire in August 2021.

The second of these patent families relates to the diagnosis of colorectal carcinoma and/or liver cancer on the basis of methylation analysis of the Septin9 gene. The patent family includes three issued patents for Septin9 in the United States, 22 patents granted under the EPC, two granted patents in China and two granted patents in Hong Kong, 13 granted patents outside of the U.S., EPC member states and China/Hong Kong, one patent application in the United States, one patent application in China and three patent applications in countries other than the United States, EPC member states and China. Two of the issued U.S. patents are scheduled to expire in 2027, while the other issued patents are scheduled to expire in 2026. One patent in China has been declared partially invalid (see *10.18.1 "— Legal Proceedings — China IP Issue"*).

The third of these patent families relates to the diagnosis of non-cancerous hyper-proliferative disorders on the basis of methylation analysis of the Septin9 gene. The patent family includes one patent application in the United States and three patents outside of the U.S. and EPC member states. The patents and patent applications, if issued, are expected to expire in 2027.

The fourth of these patent families relates to methods using primer sets specific for bisulfite converted Septin9 gene, as well as kits comprising such primers. The patent family includes one issued patent in the United States, and 56 issued patents under the EPC or in Hong Kong. The issued U.S. patent is scheduled to expire in 2027 and the foreign patents are expected to expire in 2028.

The fifth of these patent families relates to methods for prognosis and treatment success of hyper-proliferative diseases, in particular of colorectal carcinoma on the basis of methylation analysis of the Septin9 gene. The patent family includes one issued patent and one patent application in the United States, 21 granted patents under the EPC, one patent application in China, as well as ten granted patents and five patent applications in countries other than the United States, EPC member states and China. The issued U.S. patent is scheduled to expire in 2033, while the other issued patents and the patent applications, if issued, are expected to expire in 2032.

10.12.1.2. Methylation Analysis of the SHOX2 and PTGER4 genes

Our patent portfolio relating to our methods for analyzing methylation of the SHOX2 and PTGER4 genes includes two distinct patent families that we own.

The first of these patent families relates to the diagnosis of lung, breast or bladder cancer on the basis of methylation analysis of the SHOX2 and/or PTGER4 genes. The patent family includes 32 granted patents under the EPC and six granted patents in countries other than the United States or EPC member states directed to analysis of the SHOX2 gene. In addition, this patent family includes six granted patents under the EPC, and one granted patent and one patent application in countries

other than the United States or EPC member states directed to analysis of the PTGER4 gene. The patents and patent applications, if issued, are expected to expire in 2028.

The second of these patent families relates to the diagnosis of hyper-proliferative diseases on the basis of certain assays and/or the combined methylation analysis of the SHOX2, Forkhead Box L2 and PTGER4 genes. The patent family includes one granted patent in the United States, 22 granted patents under the EPC and two granted patents in countries other than the United States or EPC member states comprising composition of matter for Epi proLung 2.0 assays and five patent applications in the United States, EPC member states, China, Hong Kong and Japan. The patent and patent applications, if granted, are expected to expire in 2035.

10.12.1.3. Methylation Analysis Technology

Our patent portfolio relating to the methylation analysis technology we use includes four distinct patent families that we own or license.

The first of these patent families relates to the use of the scavenger Trolox in bisulfite conversion of DNA. The patent family includes two issued patents in the United States, and 12 issued patents in EPC member states. One of the U.S. patents is scheduled to expire in 2027, while the other patents are scheduled to expire 2026.

The second of these patent families relates to the use of a blocker probe to increase sensitivity for methylated CpGs present in small amounts in samples. The patent family includes one issued patent in the United States, 17 patents issued under the EPC and eight patents issued in countries outside of the United States, EPC member states and China. The issued patents are scheduled to expire between March 2022 and August 2023.

The third of these patent families relates to a method of desulfonating bisulfite treated DNA without an intermediate step between the bisulfite treatment and the DNA amplification reaction. The patent family includes one granted patent in the United States, 15 granted patents under the EPC and three granted patents in other countries. The granted patents are scheduled to expire in 2025.

The fourth of these patent families, non-exclusively licensed from Qiagen GmbH, Hilden, Germany, relates to the use of THFA in bisulfite conversion reactions. The patent family includes one issued patent in the United States, four issued patents under the EPC and one in Japan. The U.S. patent is scheduled to expire in 2028, while the other patents are scheduled to expire in 2027.

10.12.2. Trademarks

We own one U.S. trademark related to our product Epi proColon that is registered with the USPTO. We also registered HCCBloodTest in the United States. In addition, we own eight registered trademarks in Germany, eight Union trademarks (EM) in the EU, three registered trademarks in China, and Epi proColon trademarks registered in Argentina, Brazil, Chile and Russia.

10.13. Real Estate and Leases

We do not own any real estate. We lease facilities in Berlin, Germany, as well as in Germantown, Maryland and San Diego, California in the United States. For our headquarters in Berlin, we lease a total of approximately 1,100 square-meters of laboratory and office space under a lease agreement which commenced on April 1, 2014 and is scheduled to terminate on April 30, 2023. We have the option to extend the lease by three more years. In San Diego, we lease a total of approximately 8,300 square-feet of office and laboratory space under a lease agreement which commenced on July 9, 2018, has a term until December 21, 2021, and which we intend to extend before its expiration. In Germantown, we lease a total of approximately 50 square-meters of office

space under a lease agreement which commenced on January 1, 2014 and is automatically renewed on a monthly basis.

We believe that our existing facilities are adequate to meet our current and mid-term needs, and that suitable additional or alternative spaces will be available in the future on commercially reasonable terms.

10.14. Other Key Relationships with Academic Partners and Clinical Networks

The development of innovative biomedical products would not be possible without input from scientific thought leaders and key medical opinion leaders in the disease areas concerned. We have built an extensive network of clinicians and medical institutions with which we are able to run well-designed clinical studies under the Good Clinical Practice ("**GCP**") standard, as set forth in the International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use harmonized tripartite guideline for good clinical practice E6(R1). These studies are at the core of our biomarker research and IVD development. To perform these studies, we collaborate with an international network of clinical and academic sites, including gastroenterology clinics, academic medical centers, regional cancer centers and oncology clinics. Along with these sites, we sponsor clinical studies involving a collection of biospecimens and clinical data compliant with GCP and International Council for Harmonization of Technical Requirements for Pharmaceutical Use in Humans requirements, which are used to support product research, development and validation activities. Over the course of more than ten years, we have collaborated with over 200 individual investigators and institutions.

10.15. Environmental Matters

Our operations require the use of certain materials, primarily human blood samples and solvents, which subject us to a variety of federal, state, local and foreign environmental, health and safety laws, regulations and permitting requirements, including those relating to the handling, storage, transportation and disposal of biological materials and wastes. We believe we comply with all such regulations that we are aware of, but in case of non-compliance, could be held liable for fines and damages, including as a result of our, or others', operations or activities should contamination of the environment or individual exposure to such substances occur. For risks associated with environmental matters, see also *1.4.6. "Risk Factors — Regulatory Compliance Risks — We are subject to environmental, health and safety laws and regulations and may become exposed to liability and substantial expenses in connection with environmental compliance and remediation activities."*

10.16. Insurance

We maintain comprehensive business liability insurance coverage (*Betriebshaftpflichtversicherung*) for our business operations, including product liability. Our other main insurance policies include business interruption, general and property damage, loss of business income and D&O. Our insurance policies are subject to customary exclusions, limits and deductibles. the same time, we have identified several risks that cannot be insured on economically feasible terms and for which, therefore, no insurance cover has been purchased. These risks include, among other risks, acts of war, political unrest, or certain cyber breaches and nuclear catastrophes.

We believe that we have adequate insurance coverage against all material risks that are typically insured against by similar companies with comparable risk exposure. Insurance coverage is

regularly verified and adjusted when necessary. However, we may incur losses that are not covered by existing policies or may exceed the coverage level stipulated in the insurance contracts. Furthermore, we may not be able to maintain adequate insurance coverage at appropriate premiums in the future.

10.17. Employees

As of June 30, 2021, we employed 31 employees (headcount), excluding trainees, apprentices, short-term employees (*Aushilfen*), interns, temporary agency employees (*Leiharbeitnehmer*) and freelancers. This headcount includes our members of the Executive Board.

The following table shows our number of employees (headcount) as of June 30, 2021, and December 31, 2020, 2019 and 2018, broken down by function:

	As of June 30,	As of December 31,		
	2021	2020	2019	2018
	(unaudited)	(audited)		
Research, product development, IP, regulatory affairs, quality assurance and manufacturing[1]	16	18	21	21
Business and commercial development, customer and technical service, accounting, finance, legal, human resources, IT, investor relations and general management[1]	15	19	20	23
Total employees[1]	**31**	**37**	**41**	**44**

[1] Headcount includes Executive Board members.

The following table shows our number of employees (headcount) as of June 30, 2021 and December 31, 2020, 2019 and 2018 broken down by regions:

	As of June 30,	As of December 31,		
	2021	2020	2019	2018
	(unaudited)	(audited)		
Germany[1]	25	28	30	31
United States[1]	6	9	11	13
Total employees[1]	**31**	**37**	**41**	**44**

[1] Headcount includes Executive Board members.

Between June 30, 2021 and the date of the Prospectus, the number of employees has not materially changed.

None of our employees are covered under a collective bargaining agreement and we are not subject to co-determination under German law. A works council under German law is established at the German AG.

With regard to COVID-19, we have taken certain measures to ensure the safety and health of our employees. For instance, hygiene concepts were developed and remote working arrangements were put in place for our employees as far as possible (*i.e.*, with the notable exception of classic laboratory work). Such options could be implemented at short notice, as the required technical equipment and infrastructure was available in the Group. In mid-April 2020, we took certain measures concerning our employees to lower our cost base. Such measures included, among other things, the introduction of short-time work (*Kurzarbeit*) for all employees at our Berlin site and not replacing employees leaving the Group for the time being.

For information on the stock option program for our employees, see *16.5. "Governing Bodies — Stock Option Programs".*

10.18. Legal Proceedings

We are occasionally involved in legal proceedings within the scope of our business activities, and this will likely occur in the future as well. Proceedings relating to our operative business have in the past and will likely in the future include, among others, disputes with licensees, partners, manufacturers or suppliers, as well as disputes relating to intellectual property rights.

It is impossible to determine or predict the outcome of pending or threatened cases. We nevertheless believe that, other than the proceedings described below, during a period covering the previous twelve months, no governmental, legal or arbitration proceedings (including any proceedings which are pending or threatened of which we are aware) may have, or have had in the recent past, a material effect on the Group's or the Company's financial position or profitability.

For details on CMS's recent NCD for blood-based biomarker tests, see *10.7.2. "— Epi proColon Medicare Reimbursement — Medicare Coverage"*.

10.18.1. China IP Issue

In late 2017, the Chinese company Weizhen was found to be developing, manufacturing, and marketing kits for the detection of Septin9 in colon cancer. In response, our then-Chinese partner BioChain filed an infringement suit against Weizhen based on BioChain's exclusive license for a certain patent under Chinese law which we had granted to them. Weizhen filed a request for invalidation of that patent in November 2017. In May 2018, the Chinese patent re-examination board determined that our patent was invalid, which we appealed in August 2018. Following an amendment of our agreement with BioChain, we took control of the legal management and protection of our IP in China and filed a second lawsuit against Weizhen based on our core Septin9 Chinese patents in August 2018 before the Shanghai Intellectual Property Court, based on the following:

- Manufacturing and sale of infringing products (Septin9 kits) by Weizhen;
- Offering for sale the infringing products by Weizhen; and
- Use of infringing products (providing detection service) by Duwei (a subsidiary lab testing service of Weizhen located in Shanghai) and Weizhen;

According to our analysis and based on current evidence, the infringing product is identical or equal to 16 claims outlined in our Septin9 patent even without knowledge of the sequences of the primer/blocker/probe used.

On July 15, 2019 however, the Reexamination and Invalidation Department of the CNIPA deemed our Septin9 patent in China partially invalid. The patent was declared invalid for the detection of hepatocellular cancer and for the detection of colorectal cancer based on body fluids (urine, blood plasma, blood serum, whole blood, isolated blood cells, cells isolated from the blood and combinations thereof). Epi proColon 2.0 CE, as a blood-based screening test for colorectal cancer, is affected by this invalidation and no longer patent-protected, as is the HCCBloodTest as a test for the detection of hepatocellular cancer. Other parts of our Chinese patents, *e.g.*, the detection of colorectal cancer based on biological samples consisting of cell lines, histological slides, biopsies, paraffin-embedded tissue, stool, colonic effluent and combinations thereof, were not subject of the proceedings and remain unaffected. The decision has no impact on our Septin9 patents in other parts of the world.

The decision of the CNIPA Reexamination and Invalidation Department is not yet legally effective and we filed an appeal on October 10, 2019. A hearing on our appeal took place in September 2020, but it is unclear when a ruling may be expected. In light of the decision of the CNIPA Reexamination

and Invalidation Department, we have withdrawn our (second) infringement lawsuit against Weizhen and we intend to file a new infringement lawsuit against Weizhen in case the invalidation appeal is resolved in our favor.

For a description of the risks resulting from our dependency on patents, see *1.3.1. "Risk Factors — Risks Related to Intellectual Property — Our success depends on obtaining, maintaining and enforcing patents and other intellectual property rights relating to our technologies, products and product candidates. If we are unable to protect such intellectual property rights, we may not be able to compete effectively as, for example, we could lose our ability to prevent others from utilizing our technologies or commercializing products similar or identical to ours without payment to us."*

10.18.2. BaFin Investigations

10.18.2.1. Concluded Investigations

Until May 2021, BaFin was investigating two incidents of suspected untimely publications in violation of the German Securities Trading Act (*Wertpapierhandelsgesetz*).

On July 4, 2019, the Company had received a hearing letter from BaFin because BaFin was investigating the suspicion of an untimely publication of the total number of voting rights following the implementation of a capital measure in 2017. The investigation was based on the following circumstances:

On October 6, 2017, a capital increase of the Company was entered into the commercial register, whereby the total number of issued shares changed from 22,735,260 to 24,014,360. On October 12, 2017, the Company received a notice from BaFin to publish the change in the total number of voting rights, which the Company complied with on the same day. BaFin alleges that the publication on October 12 violated Section 26a para. 1 sentence 1 of the German Securities Trading Act (*Wertpapierhandelsgesetz*) (old version), according to which an issuer is obliged to publish the total number of voting rights and the effective date of the increase or decrease without delay, at the latest within two trading days after the entry of the capital increase into the commercial register. The Company had delegated such obligation to a qualified employee, who until the incident, had worked reliably and without any mistakes. In the opinion of BaFin, the notification should have been made by October 10, 2017 at the latest pursuant to this provision.

Following settlement discussions between the Company and BaFin, in May 2021, BaFin imposed a fine of EUR 24 thousand on the Company, which concluded the investigation.

In a second BaFin investigation regarding a suspected untimely publication of a voting rights notification by the Company in 2019, BaFin notified the Company in May 2021 that it had discontinued its investigation.

10.18.2.2. Ongoing Investigation

On April 29, 2021, the Company received a hearing letter from BaFin in connection with an investigation by BaFin of a suspected violation by the Company in 2019 of its obligation to disclose inside information by way of an ad-hoc notification pursuant to Article 17 of Regulation (EU) No. 596/2014 (the "**Market Abuse Regulation**"). The investigation is based on the following circumstances:

In its press release of August 7, 2019, on the occasion of the publication of the financial results for the first half of 2019, the Company announced that due to the delays in the reimbursement decision in the United States, the revenue target for 2019 had been adjusted from a range between EUR 3.0 million and EUR 6.0 million to a range between EUR 2.0 million and EUR 4.0 million. Previously, in a press release on May 8, 2019, the Company had confirmed the range between EUR 3.0 million

and EUR 6.0 million as revenue target for 2019, and had stated that such target could be achieved even without a reimbursement decision by CMS. BaFin suspects that the adjustment of the revenue target for 2019 may have constituted inside information, and that the failure of the Company to publish such information by way of an ad-hoc notification may constitute a violation of Article 17 of the Market Abuse Regulation. In our response to the hearing letter, we have rejected BaFin's allegations on the grounds that the adjustment of the revenue target for 2019 did not constitute inside information in our view.

According to Section 120 para. 18 sentence 2 no. 2 of the German Securities Trading Act (*Wertpapierhandelsgesetz*), in case BaFin were to find an intentional or grossly negligent failure to publish an inside information in violation of Article 17 of the Market Abuse Regulation, this could be punished with a fine of up to the higher of EUR 2.5 million and 2% of the Company's total revenue in the year preceding the imposition of the fine.

11. MATERIAL AGREEMENTS

11.1. Mandatory Convertible Bonds 2021/2024

11.1.1. Terms of the Mandatory Convertible Bonds 2021/2024

On January 7, 2021, the Executive Board, with consent of the Supervisory Board, resolved to issue the Mandatory Convertible Bonds 2021/2024 (ISIN: DE000A3H3ER4; WKN: A3H3ER) making use of the Authorization 2020/II (see *15.5.2. "Information on the Share Capital of Epigenomics AG and Applicable Regulations — Authorization to Issue Convertible Bonds — Authorization 2020/II"*). Following a subscription period for existing shareholders from January 13, 2021 until January 27, 2021, Mandatory Convertible Bonds 2021/2024 in an aggregate nominal amount of EUR 5,500,000.00 were issued on February 1, 2021 resulting in net proceeds in the amount of approximately EUR 4.55 million. In reliance of the exception in Article 3 para. 2 lit. b Prospectus Regulation in connection with Section 3 no. 2 of the German Securities Prospectus Act (*Wertpapierprospektgesetz*), the Mandatory Convertible Bonds 2021/2024 were issued without publication of a prospectus.

The Mandatory Convertible Bonds 2021/2024 are divided into 500,000 notes (*Teilschuldverschreibungen*) with a nominal value of EUR 11.00 each. The Mandatory Convertible Bonds 2021/2024 are euro denominated, non-interest bearing and subordinated (*i.e.*, the obligations of the Company under the Mandatory Convertible Bonds 2021/2024 constitute subordinated and unsecured obligations, ranking *pari passu* among themselves and with all other equally subordinated obligations). In the event of insolvency of the Company, the Mandatory Convertible Bonds 2021/2024 shall be fully subordinated to (i) obligations pursuant to Section 39 para. 1 no. 5 German Insolvency Statute (*Insolvenzordnung*) and (ii) all other present and future obligations of the Company which pursuant to their terms or mandatory law rank *pari passu* or senior to obligations pursuant to Section 39 para. 1 no. 5 German Insolvency Statute (*Insolvenzordnung*), including obligations having rank pursuant to Section 38 and Section 39 para. 1 no. 1 to 4 German Insolvency Statute (*Insolvenzordnung*). The Mandatory Convertible Bonds 2021/2024 are governed by German law.

Since April 1, 2021, the Mandatory Convertible Bonds 2021/2024 may be converted into Shares during the first 14 days of each quarter, as further specified in the terms and conditions of the bonds. On February 29, 2024, any still outstanding Mandatory Convertible Bonds 2021/2024 shall be mandatorily converted into Shares. The full conversion of all Mandatory Convertible Bonds 2021/2024 is expected to result in the issuance of an additional 5,000,000 shares of the Company. The conversion price was initially set at EUR 1.10, subject to certain adjustments, including in cases of (i) a capital increase from capital reserves or retained earnings or against cash contribution, (ii) a share split or reverse share split, (iii) a capital decrease, as well as (iv) an issuance of other securities with pre-emptive rights, in each case as further specified in the terms and conditions. In addition, the terms and conditions of the bonds provide for further adjustment of the conversion price in case of, among other things, distributions by the Company to its shareholders, a merger, split-up or spin-off. As of the date of the Prospectus, 63,792 notes (*Teilschuldverschreibungen*) remain outstanding under the Mandatory Convertible Bonds 2021/2024.

Upon any exercise of the conversion right by a holder of the Mandatory Convertible Bonds 2021/2024 and upon mandatory conversion, only full shares shall be delivered. Remaining fractional shares will not be delivered. If and to the extent that due to compulsory provisions of law the Company is unable to issue the New Shares and in addition the Company does not hold deliverable treasury shares upon the exercise of a conversion right by a holder of the Mandatory Convertible

Bonds 2021/2024 or mandatory conversion, the Company shall pay a cash amount in euro calculated as an amount equal to the arithmetic average of the XETRA-quotations for such number of shares as further specified in the terms and conditions of the bonds.

In accordance with Section 69 para. 2 German Stock Exchange Admission Regulation (*Börsenzulassungs-Verordnung*), the Shares to be delivered shall be admitted to trading on the regulated market (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) no later than one year after their issue.

The conversion right of a holder of the Mandatory Convertible Bonds 2021/2024 shall remain unaffected by a takeover bid, a mandatory takeover bid and/or the occurrence of a change of control. The occurrence of a takeover bid, a mandatory takeover bid and/or a change of control shall not lead to an adjustment of the conversion price. Any holder of the Mandatory Convertible Bonds 2021/2024 is entitled to declare all or some of his or her notes due and demand immediate redemption at the nominal amount in case (i) the Company announces its inability to meet its financial obligations or ceases its payments, or (ii) a court opens insolvency proceedings against the Company or the Company applies for or institutes such proceedings.

In accordance with the German Act on Issues of Debt Securities (*Gesetz über Schuldverschreibungen aus Gesamtemissionen*) and as further specified in the terms and conditions of the Mandatory Convertible Bonds 2021/2024, the holders of the Mandatory Convertible Bonds 2021/2024 may agree with the Company on amendments to the terms and conditions with regard to certain matter by resolution with majority but in any case requiring consent of the Company.

11.1.2. Backstop Agreement with Deutsche Balaton in 2020

Prior to the issuance of the Mandatory Convertible Bonds 2021/2024, on November 3, 2020, the Company had entered into a subscription and backstop agreement with, among others, Deutsche Balaton and certain other companies affiliated with Deutsche Balaton within the meaning of Sections 15 *et seqq.* German Stock Corporation Act (*Aktiengesetz*), in which Deutsche Balaton undertook, subject to certain conditions, to subscribe for convertible bonds of the Company to be issued pursuant to the Authorization 2020/II (as defined below) in a total nominal amount of up to EUR 4,000,000.00 by exercising its subscription right and, in addition, by acquiring convertible bonds that the shareholders have not subscribed to. Conversely, the Company undertook to offer Deutsche Balaton convertible bonds for purchase after expiry of the subscription period to the extent Deutsche Balaton is then obliged to purchase convertible bonds not subscribed to by shareholders.

As all Mandatory Convertible Bonds 2021/2024 were subscribed for by the Company's shareholders during the subscription period, no additional bonds were sold to Deutsche Balaton after expiry of the subscription period.

11.2. The New Bonds

11.2.1. Terms of the New Bonds

On June 11, 2021 and on August 23, 2021, the Executive Board, in each case with consent of the Supervisory Board, resolved to issue the New Bonds making use of the Authorization 2020/I (see *15.5.1. "Information on the Share Capital of Epigenomics AG and Applicable Regulations — Authorization to Issue Convertible Bonds — Authorization 2020/I"*).

For details on the New Bonds, see *4.1. "Information about the Securities — Information about the New Bonds"*.

11.2.2. Backstop Agreement with Deutsche Balaton in 2021

On June 11, 2021, the Company entered into the Backstop Agreement 2021 with Deutsche Balaton, in which Deutsche Balaton irrevocably undertook, subject to certain conditions, *vis-à-vis* the Company to acquire New Bonds in a total nominal amount of up to EUR 18,150,000.00 by exercising its share of the Subscription Rights in their entirety and, in addition, by acquiring at the Subscription Price all New Bonds to which corresponding subscription rights and Oversubscription rights have not been exercised by the end of the Subscription Period. The obligations of Deutsche Balaton under the Backstop Agreement 2021 expire upon the occurrence of the any of the following conditions subsequent: (i) a certain decrease of the daily closing price of the DAX until the end of the Subscription Period; (ii) the opening of insolvency proceedings over the assets of the Company has been applied for; (iii) the Company publishes the convocation of a shareholders' meeting and notifies the shareholders' meeting of a loss amounting to half of the share capital pursuant to Section 92 German Stock Corporation Act (*Aktiengesetz*) or the Company is obliged to do so; (iv) the 5-days-volume weighted average price of the Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) falls below a certain threshold; or (v) the terms and conditions of the New Bonds do not comply with those agreed in the exhibits to the Backstop Agreement 2021 (except for certain possible or approved deviations). Conversely, the Company undertook to offer such New Bonds to Deutsche Balaton if and to the extent Deutsche Balaton is obliged to purchase any New Bonds pursuant to the Backstop Agreement 2021.

As consideration for Deutsche Balaton's obligations pursuant to the Backstop Agreement 2021, Deutsche Balaton is further entitled to a commission in the amount of 3.5% of the maximum total subscription price of EUR 18,150,000.00, *i.e.*, in the amount of EUR 635,250.00 which was paid in full on July 2, 2021.

On August 20, 2021, the Company and Deutsche Balaton entered into an amendment to the Backstop Agreement 2021 and agreed to reduce Deutsche Balaton's aforementioned undertaking to acquire New Bonds to a total aggregate amount of EUR 16,500,000.00. In exchange, Deutsche Balaton (a) waived the aforementioned condition subsequent under (iv) that the obligations of Deutsche Balaton expire if the 5-days-volume weighted average price of the Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) falls below a certain threshold, (b) agreed to refund the corresponding *pro rata* share in its commission, *i.e.*, EUR 57,750.00, and (c) irrevocably undertook until December 31, 2023, subject to certain conditions, to participate at the request of the Company in one or more future capital measures of the Company in the total amount of at least EUR 1,650,000.00.

In addition, Deutsche Balaton has (i) committed to a lock-up commitment *vis-à-vis* the Bank regarding any New Bonds acquired under the Backstop Agreement 2021 and any shares of the Company resulting from the conversion of such New Bonds, as well as at least additional 950,395 Shares, and (ii) waived any liability of the Bank that might arise from the Prospectus or the application for admission of the New Shares to a regulated market (for details, see *3.8. "The Offering and the Listing — Lock-Up Commitment and Waiver of Liability by Deutsche Balaton and ABC Beteiligungen AG"*).

11.3. Sales Partnership Agreement with Polymedco in North America

On September 28, 2018, Epigenomics, Inc. entered into the Sales Partnership Agreement with Polymedco, which includes an amendment dated June 26, 2019. The Agreement is an amended and restated version of a previous joint commercialization agreement with Polymedco initially entered into in 2013 by us and later assigned to Epigenomics, Inc. with agreement dated May 28, 2015. Pursuant to the Sales Partnership Agreement, Polymedco acts as an exclusive sales and

marketing agent for Epi proColon in the United States (and Canada and Mexico, to the extent regulatory approvals are obtained) and receives a commission per test sold. Epigenomics, Inc. may continue to distribute Epi proColon ourselves, however, any commercial sales by our own sales representative also incur commission fees payable to Polymedco and count towards Polymedco's minimum sales requirement (see below).

Polymedco's obligations under the agreement include the promotion (*e.g.*, advertising), marketing and sales support for Epi proColon according to an agreed commercialization plan. Epigenomics, Inc.'s responsibilities include, among other things, invoicing and customer service, as well as medical marketing (*e.g.*, conducting studies and presenting to guideline bodies and medical societies) and interactions with CMS regarding reimbursement. The Sales Partnership Agreement provides for certain minimum sales requirements each year; in case Polymedco fails to fulfill these requirements, Epigenomics, Inc. may terminate the agreement. The agreement has an initial term until December 31, 2023, with automatic extension for five years if the parties timely agree on minimum sales and a commercialization plan for such extension period, and subject to extraordinary termination by either party.

11.4. License Agreements

11.4.1. BioChain License Agreement

In October 2013, we entered into the BioChain License Agreement with BioChain, pursuant to which, as amended, we granted BioChain and BioChain Beijing Science & Technology, Inc., an affiliate of BioChain, an exclusive license to, among other things, commercialize blood-based colorectal cancer screening IVD products utilizing certain of our patents and know-how, in particular in China.

Under the BioChain License Agreement, we received a low six-digit upfront fee and mid-single-digit percentage royalties on net revenues from the sale of the licensed products. BioChain's obligation to pay us such royalties was to continue until the later of 15 years after the first commercial sale of such licensed products or the fifth anniversary of the expiration of the last-to-expire licensed patent (subject to an earlier termination for cause). BioChain was required to make a minimum annual payment to us based on a minimum number of its tests sold, and a specified royalty per test sold. If BioChain failed to meet these minimum annual sales and payment requirements, we had the option to terminate BioChain's exclusivity; and further, should any such payment-related breach not be cured within the stipulated time, we retained the right to terminate the agreement in its entirety. Furthermore, either party was entitled to terminate the BioChain License Agreement for cause in case of a breach of any material provision by the other party, subject to a 45-day cure period. If the royalty payments made by BioChain did not exceed an agreed minimum annual payment for three consecutive years, this also constituted a reason justifying such termination for cause.

Because BioChain's royalty payments did not exceed these minimum thresholds for three consecutive years, we declared the termination of the BioChain License Agreement in November 2018, as well as in January, March and April 2019. Following a contest of our termination, we reached a settlement with BioChain in October 2019, pursuant to which BioChain made a low six-digit USD payment to us, the BioChain License Agreement is deemed terminated as of December 31, 2018, and all mutual claims are waived.

11.4.2. In-Bound License Agreement with USC

Until May 2020, we were party to a license agreement with USC. Pursuant to such license agreement, which was effective as of January 1, 2008, USC granted us a worldwide exclusive license, with rights to sub-license, to make, have made, use, sell, offer to sell, import, distribute or otherwise transfer products covered by certain USC patents and patent applications. The licensed

patent rights related to biomarkers and methods for the detection of CpG methylation using a displacement probe covering the CpG site in a PCR that allows real-time detection of methylated or unmethylated CpG sites. Both Epi proColon and Epi proLung use the technology previously licensed under this agreement. USC and the inventors of the licensed patent rights retained the right to use the technology covered by the licensed patent rights for educational and research purposes. We were obligated to exercise our best efforts in introducing the licensed products into the commercial market as soon as possible and to keep such licensed products reasonably available to the public. Pursuant to the agreement, we were obligated to pay USC a low single-digit royalty on net revenues of the licensed products, subject to a low six-digit minimum annual royalty amount for certain groups of licensed patent rights, as well as royalties on any sublicense revenue.

As all patents licensed under the license agreement had expired by May 2020, the license agreement itself expired on that date. The technology can since be used without a license.

11.5. Cooperative Regulatory and Marketing Agreement with Life Technologies Corporation

In July 2011, we entered into a cooperative regulatory and marketing agreement with Life Technologies Corporation, a wholly owned subsidiary of Thermo Fisher Scientific, Inc., which enabled us to obtain FDA approval and subsequently commercialize Epi proColon in the U.S. market on Life Technologies' AB 7500 Fast Dx platform. In addition, Life Technologies Corporation is the sole validated supplier of the magnetic beads used in our Epi proColon test, which are supplied under a separate supply and license agreement entered between the companies in April 2011. Both agreements had initial terms of five years and automatically extend for subsequent periods of 12 months unless we or Life Technologies Corporation give notice that the respective agreement should not be so extended. We and Life Technologies Corporation each have the right to terminate the agreements for breach by the other party if the breach is not cured within a reasonable period and following written notice of such breach, and in the event either we or Life Technologies Corporation reasonably determine that an agreement will compromise such party's good standing, regulatory clearance or approval with the FDA for any product of such party.

11.6. Blood Sample Sale Agreement

On August 17, 2021, the Company, as seller, and New Horizon Health Limited, as purchaser, entered into a sale and transfer agreement for the sale of a number of the Company's non-essential blood samples. Under the agreement, the Company committed to sell 4,325 patient plasma samples and 3,899 so-called buffy coat samples (buffy coat means that certain part of an anticoagulated blood sample that contains most of the white blood cells and platelets following density gradient centrifugation) to the purchaser. The aggregate purchase price shall be USD 6.7 million (subject to certain adjustments), of which an amount of USD 4.7 million was immediately payable upon signing and has been paid as of the date of the Prospectus. The remaining amount of USD 2.0 million is to be paid into an escrow account and shall be released to us (i) in the amount of USD 1.5 million upon timely successful completion of testing for the validity and stability of the Company's samples and (ii) in the amount of USD 500 thousand upon timely delivery of certain sale sample documentation. The purchase price is subject to adjustments with respect to the quantity of blood samples actually sold and transferred to the purchaser. In addition, the purchase price may be reduced by USD 1.5 million in the event that the Company has not provided a successful validation test, and by an additional amount of up to USD 500 thousand in case the sale sample documentation is found to be incomplete whereupon the respective amount shall be released from escrow to the purchaser. The agreement contains certain customary representations and warranties by us as seller.

12. REGULATION

12.1. Regulatory Framework for our Operations and Products in the United States

12.1.1. Federal Food, Drug, and Cosmetic Act

In the United States, IVDs are regulated by the FDA as medical devices under the Federal Food, Drug, and Cosmetic Act ("**FDCA**").

12.1.2. Marketing Pathways

There are three main regulatory pathways to receive authorization to market IVDs in the United States: a 510(k) premarket notification, a PMA, and a De Novo request. The FDCA establishes risk-based standards for determining the pathway to eligibility for a particular IVD device.

The information that must be submitted to the FDA in order to obtain clearance or approval to market a new medical device varies depending on how the medical device is classified by the FDA. Medical devices are classified into one of three classes on the basis of the controls necessary to reasonably ensure their safety and effectiveness. Class I devices are subject to general controls, including labeling and adherence to the FDA's Quality System Regulation ("**QSR**", 21 CFR Part 820), which establishes device-specific cGMP requirements. Class II devices are subject to general controls and special controls, including performance standards and post-market surveillance. Class III devices are subject to these requirements, as well as to PMA. Most Class I devices are exempt from premarket submissions to the FDA; most Class II devices require the submission of a 510(k) premarket notification or a De Novo request (when no predicate device exists); and Class III devices require submission of a PMA application. Our Epi proColon test is, and we expect that our HCCBloodTest (liver cancer test) and Epi proLung product will be, a Class III device. We may also explore a De Novo path for these and other future products.

12.1.3. Premarket Approval

The PMA process, which we completed for Epi proColon and through which we will seek marketing authorization for our future products, is complex, costly and time-consuming. A PMA application must be supported by detailed and comprehensive scientific evidence, including clinical data, to demonstrate the safety and efficacy of the medical device for its intended use. If the device is determined to present a "significant risk," the sponsor may not begin a clinical trial until it submits an investigational device exemption ("**IDE**") to the FDA and obtains approval from the FDA to begin the trial.

After the PMA application is submitted, the FDA has 45 days to make a threshold determination that the application is sufficiently complete to permit a substantive review. If the application is complete, the FDA will accept it for filing. The FDA is subject to a non-binding performance goal review time for a PMA application of 180 days from the date of filing, although in practice this review time is often longer. Questions from the FDA, requests for additional data and referrals to advisory panels may delay the process considerably. Indeed, the total process may take several years and there is no guarantee that the PMA application will ever be approved. Even if approved, the FDA may limit the indications for which the device may be marketed. The FDA may also request additional clinical data as a condition of approval or after the PMA is issued. Any changes affecting the safety and efficacy of the medical device may require a PMA Supplement to be submitted, reviewed and approved. The time for approval of a PMA Supplement varies based on the significance of the change to the medical device. The FDA is subject to non-binding performance goal review times for a PMA Supplement of

90, 180, and 320 days (depending on the type of supplement) from the date of filing although in practice these review times may take longer and there is no certainty of approval.

12.1.4. De Novo Request

In some cases, we may seek marketing authorization of our products through a De Novo Request. This regulatory path is designed for new devices for which general controls alone, or general and special controls, provide reasonable assurance of safety and effectiveness for the intended use, but for which there is no legally marketed predicate device, nor an existing regulatory classification, nor an approved PMA similar to the new device. Without a valid predicate, FDA automatically classifies a new device into the highest risk category (Class III) because there is no precedent for safety or efficacy. The De Novo process allows FDA to classify a device from Class III ("high risk") to Class II or I ("moderate" to "low" risk). For this "down classification" to be granted, a manufacturer must demonstrate that benefits and risks of the new device are well understood and general and special controls are sufficient to provide a reasonable assurance of safety and efficacy based on intended use. A De Novo Request is submitted to FDA to make a classification determination of the new device and obtain a "grant" or "decline" decision from the FDA. Similar to a PMA application, a De Novo Request is supported by detailed and comprehensive scientific evidence, including clinical data, to demonstrate the safety and efficacy of the medical device for its intended use. Compiling the required evidence to support a De Novo Request can be costly and time-consuming.

After a De Novo request is submitted, the FDA has 15 days to make a threshold determination that the application is sufficiently complete to permit a substantive review. If the application is complete, the FDA will accept it for substantive review. The FDA is subject to a non-binding performance goal review time for a De Novo request of 150 days from the date of filing, although in practice this review time is often longer. Questions from the FDA and requests for additional data may delay the process considerably. Additionally, there is no guarantee that the De Novo request will be granted. Even if granted, the FDA may limit the indications for which the device may be marketed.

12.1.5. Quality System Regulation and Inspection Requirements

All medical device manufacturers are required to be in compliance with FDA's QSR, which sets forth cGMP requirements. For a Class III device, a pre-approval inspection is required. In addition, clinical data for a PMA application is also audited by FDA in bioresearch monitoring inspections which include on-site inspections of some clinical trial sites. Routine post-market FDA inspections are conducted while a medical device is on the market. Violations of applicable regulations noted by the FDA during inspections of our manufacturing facilities could adversely affect the continued marketing of our tests.

12.1.6. Post-Marketing Regulations and Controls

The FDA also enforces post-marketing controls that include the requirement to submit Medical Device Reports ("**MDRs**"), to the FDA when a manufacturer becomes aware of information suggesting that any of its marketed products may have caused or contributed to a death, serious injury or serious illness or any of its products has malfunctioned and that a recurrence of a malfunction would likely cause or contribute to a death or serious injury or illness. The MDR must be filed no later than 30 days after we become aware of such information. In case one of our products presents a risk of injury or gross deception or is otherwise defective, we may be obliged to voluntarily recall this product; if we fail to do so, the FDA may issue a recall order to the manufacturer. The FDA relies on MDRs to identify product problems and utilizes these reports to determine, among other things, whether it should exercise its enforcement powers. The FDA also enforces the requirement that manufacturers submit reports of any recall, correction, removal, or field actions to the FDA if the actions are initiated to reduce a risk to health posed by the device or to remedy a

violation of the FDCA that may present a risk to health. The FDA may also require post-market surveillance studies for specified devices.

FDA regulations also govern, among other things, the preclinical and clinical testing, manufacture, distribution, labeling and promotion of medical devices. In addition to compliance with good manufacturing practices and medical device reporting requirements, we are required to comply with the FDCA's general controls, including establishment registration, device listing and labeling requirements. If we fail to comply with any requirements under the FDCA, we could be subject to, among other things, fines, injunctions, civil penalties, recalls or product corrections, total or partial suspension of production and distribution, denial of premarket notification clearance or approval of products, rescission or withdrawal of clearances and approvals, and criminal prosecution. We cannot assure you that any final FDA policy, once issued, or future laws and regulations concerning the manufacture or marketing of medical devices will not increase the cost and time to market of new or existing tests. If we fail to comply with these FDA regulations or guidelines, we may be subject to warnings from, or enforcement action by, the FDA.

12.1.7. U.S. Federal and State Anti-Kickback Statute

The federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce either the referral of an individual, or the furnishing, recommending, or arranging for a good or service, for which payment may be made under a federal healthcare program, such as the Medicare and Medicaid programs. The term "remuneration" is not defined in the federal Anti-Kickback Statute and has been broadly interpreted to include anything of value, including for example, gifts, discounts, the furnishing of supplies or equipment, credit arrangements, payments of cash, waivers of payment, ownership interests and providing anything at less than its fair market value.

Many states have also adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs, and do not contain identical safe harbors.

If we or our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from participation in U.S. federal or state healthcare programs, and the curtailment or restructuring of our operations. We may also be subject to similar foreign laws and regulations.

12.1.8. U.S. Federal and State Self-Referral Law

We are subject to a set of federal "self-referral" laws, commonly referred to as the "Stark Law", which provide, unless a specific exception applies, that physicians who, personally or through a family member, have ownership interests in or compensation arrangements or other financial relationships with a laboratory are prohibited from making a referral to that laboratory for laboratory tests which are reimbursable by Medicare. They also prohibit laboratories from submitting a claim for Medicare payments for laboratory tests referred by physicians who, personally or through a family member, have ownership interests in or compensation arrangements with the testing laboratory.

We are subject to comparable state laws, some of which apply to all payors regardless of source of payment, and do not contain identical exceptions like those provided in the Stark Law. Providers are subject to sanctions for claims submitted for each service that is furnished based on a referral prohibited under the federal self-referral laws. These sanctions include denial of payment, obligation to issue refunds, civil monetary payments and exclusion from participation in federal healthcare programs and civil monetary penalties. They may also include penalties for applicable violations of

the False Claims Act, which may require payment of up to three times the actual damages sustained by the government, plus civil penalties for each separate false claim.

12.1.9. U.S. Healthcare Reform

In March 2010, the U.S. Patient Protection and Affordable Care Act ("**ACA**"), was enacted, which includes measures that have or may significantly change the way healthcare is financed by both governmental and private insurers. Since August 2013, the Physician Payment Sunshine Act, enacted as part of the ACA, and its implementing regulations require medical device manufacturers to track certain financial arrangements with physicians and teaching hospitals, including any "transfer of value" made or distributed to such entities, as well as any investment interests held by physicians and their immediate family members. Various states have also implemented regulations prohibiting certain financial interactions with healthcare professionals and/or mandating public disclosure of such financial interactions. We may incur significant costs to comply with such laws and regulations now or in the future. The ACA has been subject to ongoing calls for repeal and replacement; at least one case dealing with its constitutionality is still pending before the U.S. Supreme Court, with oral arguments heard in November 2020. However, we cannot predict the likelihood of any such action or the effect that changes in the law would have on our business and prospects.

12.1.10. Other laws

We are also subject to numerous U.S. federal, state and local laws, as well as international laws relating to such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control, and transportation and disposal of blood and hazardous or potentially hazardous substances. We may incur significant costs to comply with such laws and regulations now or in the future.

12.2. Regulatory Framework for our Operations and Products in the European Union and Germany and Other International Laws

12.2.1. Overview

The currently applicable regulatory framework for our operations and products in the European Union ("**EU**") and Germany is essentially laid down in the EU's IVD Directive (see *12.2.2. "— Directive No. 98/79/EC (IVD Directive)"*) and corresponding national legislation of the EU member states, in particular including the Federal Medical Devices Act (*Medizinproduktegesetz*, "**MPG**") in Germany (see *12.2.3. "— Implementing National Legislation in Germany: Federal Medical Devices Act"*). The IVD Directive is binding upon the EU member states, having required implementation into national law until December 7, 1999. It was repealed by Regulation (EU) 2017/746 on IVD medical devices ("**IVD Regulation**") with effect from May 26, 2017 (see *12.2.4. "— Recent Reforms of EU Legislation: Regulation (EU) 2017/746 (IVD Regulation) and Regulation (EU) 2017/745 (MD Regulation)"*), being directly applicable in the EU member states (without conversion into national law) and with a transitional period until May 26, 2022 to come into force. Therefore, manufacturers of already approved medical devices must ensure compliance with the new requirements implemented under the IVD Regulation by May 26, 2022. Products that have already been certified by a notified body may then be marketed for a further two years (*i.e.*, until May 25, 2024), provided they meet certain criteria. Moreover, our cooperation with healthcare professionals is subject to German anti-bribery laws and regulations, in particular including the new penal provisions against bribery and corruption in the medical devices sector in Germany (see *12.2.5. "— German Anti-Bribery and Anti-Corruption Legislation in the Medical Devices Sector"*). Rights to inventions made in the context of employment relationships must be assumed in

accordance with the mandatory procedures set out in the German Employee Inventor's Act (see *12.2.6. "— German Employee Inventor's Act"*).

By contrast, our products do not currently fall within the scope of the German Medicines Act (*Arzneimittelgesetz*, "**AMG**") and German in-vitro-diagnostics regulation (*In-vitro-Diagnostika-AMG-Verordnung*). However, it is possible that future products may be covered by this regulation, depending on the disease to be diagnosed.

12.2.2. Directive No. 98/79/EC (IVD Directive)

The IVD Directive has the purpose to ensure safety, quality and performance of IVD medical devices. Generally, IVD medical devices may only be placed on the market or put into service if they comply with the requirements set out in Annex I of the IVD Directive (essential requirements) when duly supplied and properly installed, maintained and used in accordance with their intended purpose. Accordingly, the EU member States are obliged to monitor the security and quality of IVD medical devices. The essential requirements of the IVD Directive relate to, *inter alia*, product safety conditions and certain product-related information to be provided by the manufacturer. IVD medical devices considered to meet the essential requirements must in principle bear the CE marking of conformity when they are placed on the market. In order to affix the CE marking, before placing the devices on the market the manufacturer is obliged to follow certain procedures to declare conformity with the IVD Directive (conformity assessment procedures). As a general rule, IVD medical devices must be designed and manufactured in such a way that, when used under the conditions and for the purposes intended, they will not compromise, directly or indirectly, the clinical condition or the safety of the patients, the safety or health of users or, where applicable, other persons, or the safety of property. Any risks which may be associated with their use must be acceptable when weighed against the benefits to the patient and be compatible with a high level of protection of health and safety.

12.2.2.1. Classification of Our Products

The IVD Directive provides for individual conformity assessment procedures for different categories of IVD medical devices. The classification of an IVD medical device according to these categories is primarily based upon the intended use of the device and the risks or dangers it constitutes to patients, users and third parties.

- Annex II List A devices (high risk devices) are, *inter alia*, reagents and reagent products including related calibrators and control materials for determining blood groups (ABO system, rhesus (C, c, D, E, e), anti-Kell) and for the detection, confirmation and quantification in human specimens of markers of HIV infection (HIV 1 and 2), HTLV I and II and hepatitis B, C and D.
- Annex II List B devices comprise, for example, reagents and reagent products for the detection and quantification in human samples of congenital rubella and toxoplasmosis, for determining the human infections cytomegalovirus and chlamydia or for determining the tumoral marker PSA.
- Devices for self-testing are devices intended by the manufacturer to be able to be used by lay persons in a home environment.
- Other IVD medical devices not covered by Annex II of the IVD Directive and not intended to be used as devices for self-testing represent a large part of devices covered by the IVD Directive. Such devices do not constitute a direct risk to patients, are primarily used by trained professionals and as such do not require the intervention of a notified body within the conformity assessment procedures.

We believe that our products do not qualify as Annex II List A devices, Annex II List B devices or devices for self-testing and therefore fall into the category of other IVD medical devices. However, with the new IVD Regulation a risk-based classification system is taking over the former IVD classification and there is the need for re-classifying our products (see *12.2.4. "— Recent Reforms of EU Legislation: Regulation (EU) 2017/746 (IVD Regulation) and Regulation (EU) 2017/745 (MD Regulation)"*).

12.2.2.2. Conformity Assessment of Our Products

Prior to placing (potential) IVD medical devices on the EU market, we or our respective business partners are required to issue a declaration of conformity. The declaration of conformity is the procedure whereby the manufacturer or his authorized representative ensures and declares that the products concerned meet the essential requirements of the IVD Directive.

In light of the conformity assessment procedures applicable to our products, we are required to prepare certain technical documentation, which must in particular provide for a general description, the documentation of the quality system and other essential information on the product, including risk analysis, test reports, labels and instructions for use. Furthermore, we are required to ensure that the clinical validation studies and the manufacturing process follow the principles of quality assurance as appropriate for these products. Additionally, we are required to institute and maintain up to date systematic procedures to review experience gained from the IVD medical devices in the post-production phase. In order to establish such proof, we will be required to provide a performance evaluation based on suitable data, such as scientific literature, a critical analysis of the data or the results of all performance evaluations or other suitable examinations.

Additional requirements have to be met in case (i) this performance evaluation involves invasive sample collection solely or to a significant extent for the purpose of performance evaluation, (ii) in the course of the performance evaluation additional invasive or other burdensome measures are carried out, or (iii) the results gained in the course of the performance evaluation are to be used for diagnostics and cannot be confirmed by an established method. *Inter alia*, it is then necessary to apply for the consent of the competent ethical committee (*Ethikkommission*) and to obtain a permit from the competent higher federal authority. Depending on the intended use of the IVD medical device the competent higher federal authority is either the Federal Institute for Drugs and Medical Devices (*Bundesinstitut für Arzneimittel und Medizinprodukte*, "**BfArM**") in Bonn or the Paul-Ehrlich-Institute (*Paul-Ehrlich-Institut*, "**PEI**") in Langen (near Frankfurt/Main). An application would have to be filed via a central registration system controlled by the BfArM. Under certain circumstances, however, it is possible to file for an exemption from the permit requirement.

Based on the classification of our products, we are entitled to self-declare conformity with the relevant essential requirements of the IVD Directive. Thus, we will not be required to involve a notified body for conformity assessment. However, there is no guarantee that this will not change in the future. In particular, the new IVD Regulation or a change of the scope of our products may affect the applicable conformity assessment procedures. Such a change may also require the involvement of a notified body resulting in higher costs and delays in the issuance of the CE mark.

12.2.2.3. Our Certifications

In compliance with the IVD Directive, we are certified to EN ISO 13485: 2016, which represents the current recommended international standard for the design, development, manufacture, installation and servicing of medical devices, including IVD medical devices. Failure to maintain our certification in good standing could prevent us from marketing our products in the EU.

12.2.3. Implementing National Legislation in Germany: Federal Medical Devices Act

A directive shall be binding, as to the result to be achieved, upon each EU member state to which it is addressed, but shall leave to the national authorities the choice of form and methods. In Germany, the requirements set forth in the IVD Directive are transferred into national law by the MPG and certain related laws and regulations, such as the Medical Devices Regulation (*Verordnung über Medizinprodukte*, "**MPV**"). Under the MPG, and in line with the regulatory framework provided for in the IVD Directive, IVD medical devices are required, *inter alia*, to meet the applicable essential requirements and to be labeled with the CE marking of conformity when being placed on the market. On the federal level, the supervision of manufacturers is carried out by the competent higher federal authorities (BfArM or PEI). In the State of Berlin, the competent supervisory authority is the State Authority for Health and Social Matters (*Landesamt für Gesundheit und Soziales*). In addition to the declaration of conformity, the manufacturer or his/her authorized representative having its registered place of business in Germany and placing IVD medical devices on the market has to notify the competent authority along with appropriate information (including information relating to the reagents, reagent products and calibration and control materials in terms of their common technological specifications). The competent authority shall transmit such information to the BfArM for central processing and use. In addition, immediately upon commencement of activities, the manufacturer or his/her authorized representative has to appoint a person who is sufficiently reliable and possesses the expert knowledge necessary for the fulfillment of his/her functions as the safety officer for medical devices. Any changes in the person of the safety officer have to be notified to BfArM and the respective ISO certifier.

12.2.4. Recent Reforms of EU Legislation: Regulation (EU) 2017/746 (IVD Regulation) and Regulation (EU) 2017/745 (MD Regulation)

The essential aspects of the upcoming regulatory framework for IVD medical devices set out by the IVD Regulation (and Regulation (EU) 2017/745 (the "**MD Regulation**")) can be outlined as follows:

- Extended scope of application: The IVD Regulation includes a wide range of diagnostics, in particular (i) tests that provide information on the predisposition to a medical condition or a disease, such as genetic tests, (ii) tests that provide information to predict treatment response or reactions, such as companion diagnostics, or (iii) IVD medical devices manufactured and used within a single health institution only.

- Revised product classification and conformity assessment regime: According to the IVD Regulation, all currently approved in vitro diagnostic medical devices must be re-certified according to the new requirements which might lead to delays in the issuance of the CE mark. Manufacturers of IVDs currently on the market must demonstrate compliance with the new IVD Regulation requirements by May 26, 2022. The IVD Regulation introduces a new risk-based classification system based on the principles of the Global Harmonization Task Force. The IVD Regulation classifies devices in four risk classes (A to D) and establishes a set of robust risk-based classification rules, taking into account the intended use of the IVD medical devices and their inherent risks. As a general rule, the conformity assessment procedure for class A devices is carried out under the sole responsibility of manufacturers as such devices pose only a low risk to patients. For class B, class C and class D devices, the involvement of notified bodies (which is generally stronger and closer than under the current regime) is required. Moreover, the competent authorities and reference laboratories may be involved in the conformity assessment of products of the category D or C. This will extend the duration of the conformity assessment procedures. The stricter designation rules for notified bodies may lead to fewer notified bodies for IVD in the future. We currently expect that any future Epigenomics product

for the diagnosis of cancer will fall at least into class C and as such requires the involvement of a notified body.

- Person responsible for regulatory compliance: Under the IVD Regulation, manufacturers shall have available within their organization at least one person responsible for regulatory compliance who possesses the requisite expertise in the field of IVD medical devices.
- Particularly strict surveillance assessments to class C and D devices: The notified body shall randomly perform at least once every five years unannounced audits on the site of the manufacturer and, where appropriate, the site of the manufacturer's suppliers and/or subcontractors.
- Additional requirements as to the compliance management, *inter alia*, more detailed technical documentation, more comprehensive quality management system, new labeling obligations ("unique device identification"). In particular, under the IVD Regulation, the technical documentation will have to be more detailed in the future. The IVD Regulation requires manufacturers to perform clinical trials and demonstrate that the safety and performance of products are appropriate for the risk class of the product. In addition, manufacturers must collect and retain clinical data as part of an ongoing assessment of potential safety risks. Additionally, under the MD Regulation, the manufacturer must set up and maintain a post-market monitoring system appropriate to the class of risk and the nature of the product.

We believe the revision of the legislation introduces significant changes for IVD manufacturers that currently hold a CE Mark or plan to market their products in Europe. However, having an FDA-approved product in our portfolio, we consider ourselves to be in a good position to manage the new regulatory landscape.

12.2.5. German Anti-Bribery and Anti-Corruption Legislation in the Medical Devices Sector

In Germany, new penal provisions against bribery and corruption in the healthcare sector have come into force on June 4, 2016 (*Gesetz zur Bekämpfung von Korruption im Gesundheitswesen*). According to the new anti-corruption law, the offering, promising or granting of benefits to healthcare professionals (*Angehörige der Heilberufe*) may, under certain circumstances, be punishable under Section 299b German Criminal Code (*Strafgesetzbuch*, "**StGB**") if this potentially creates an improper influence on their prescription or procurement decisions, in particular with regard to the purchase of medical devices. In reverse, the demanding or taking of benefits by a healthcare professional may be punishable under Section 299a StGB. Content, scope and criminological effectiveness of the new anti-corruption law remain largely unclear, in particular as the German legislator has introduced a number of vague and undefined legal terms. About four years after implementation of the reform, no reliable conclusions can be drawn from the existing – relatively marginal – prosecution practice yet. In particular, as far as can be seen, there are still no judgments of the Federal Court of Justice (*Bundesgerichtshof*) based on the new anti-corruption law.

12.2.6. German Employee Inventor's Act

Under German law, rights to an invention made in the context of an employment relationship do not upon their creation automatically vest in or transfer to the employer. Instead, the employer must assume ownership in accordance with the mandatory procedures set out in the German Act on Employees' Inventions (*Arbeitnehmererfindungsgesetz*, "**ArbEG**"). Under the law applicable until October 1, 2009, the employer had to claim the rights to an invention in writing within four months of being notified of such invention by the employee inventor(s). If the employer failed to do so, the invention became a "free invention" solely owned by the employee inventor(s). Such ownership

essentially extends to any patents or patent applications derived from such invention (even if registered in the name of the employer). Moreover, the employee inventor(s) being the true owner(s) can assert claims for patent infringement against the employer and any third party using a patented invention. The employer could also be held liable by its customers under warranty and indemnity provisions if the customers are sued for patent infringement by the employee inventor(s). For inventions made after October 1, 2009, the employer no longer has to explicitly claim the invention within four months following notification. Rather, assumption of ownership is presumed, unless the employer has explicitly released the invention within four months following notification. With regard to inventions made by managing directors the ArbEG is not applicable. Such inventions must be assigned to the company by assignment agreement.

If an employer claims the rights to an invention in accordance with the ArbEG, the employee has a claim against the employer to receive reasonable compensation which is specified by the Guidelines for the Compensation of Employee Inventions (*Richtlinien für die Vergütung von Arbeitnehmererfindungen*). Such compensation payment is calculated by taking into account the value of the invention for the employer's business and the contribution of the employer to such invention. Typically, compensation is paid in the form of a running royalty on the basis of generated turnover. The applied royalty rate is typically lower than what a third-party licensee would have to pay taking into account the relevant market conditions. However, if the invention is very important the remuneration payable to the employee inventor can, nevertheless, be quite substantial, see *1.3.6. "Risk Factors — Risks Related to Intellectual Property — Under German law, employee inventors may own or co-own their inventions and intellectual property rights and may be entitled to receive compensation."*).

12.2.7. German Foreign Direct Investment regulation

Due to the nature of our business, the German foreign investment control regime, and potentially the foreign direct investment (FDI) regimes of other jurisdictions, might apply to our company and its subsidiary. In particular, German foreign trade law – *i.e.* the German Foreign Trade and Payments Act (*Außenwirtschaftsgesetz*, "**AWG**") and the German Foreign Trade and Payments Ordinance (*Außenwirtschaftsverordnung*, "**AWV**") –, which was newly intensified in 2020 and 2021, partly to implement Regulation (EU) 2019/452, may require foreign investors to obtain governmental approval for the acquisition of shares of the company if the acquirer directly or indirectly holds, depending on the applicable review category, at least 10%, 20%, or 25% of the voting rights of the company following the acquisition.

The AWV distinguishes between two different sets of clearance proceedings to be conducted by the German Federal Ministry for Economic Affairs and Energy (*Bundeswirtschaftsministerium*, "**BMWi**"). While the so-called sector-specific examination (Sections 60 et seqq. AWV) only applies to security-sensitive areas, in which we do not operate, our business might be subject to the so-called cross-sectoral examination (Sections 55 et seqq. AWV), which applies to certain acquisitions of a domestic company by a non-EU/EFTA acquirer that will likely effect the public order or security of Germany. Such effects may be caused by, *inter alia*, the acquisition of companies operating in the medical field. In particular, the cross-sectoral examination applies to (i) companies that develop, manufacture or distribute medical products intended for the diagnosis, prevention, monitoring, prediction, prognosis, treatment or alleviation of life-threatening and highly contagious infectious diseases or supply preliminary products or components for their development or manufacture, and (ii) companies that develop, manufacture or distribute in vitro diagnostic medical devices which are used to provide information on physiological or pathological processes or conditions or to determine or monitor therapeutic measures in connection with life-threatening and highly contagious infectious diseases or supply preliminary products or components for their development or manufacture. In

these cases, acquisitions of at least 20% of the voting rights by a non-EU/EFTA acquirer are subject to scrutiny by the BMWi. When assessing potential effects of the acquisition to public order or security, the BMWi may take into account the background of the foreign acquirer.

On a procedural level, transactions falling within the scope of the cross-sectoral examination must be mandatorily notified to the BMWi shortly after signing, which includes the disclosing of the acquirer's identity, and clearance by the BMWi is a statutory closing condition. Furthermore, the applicable FDI regime prohibits, *inter alia*, (i) exercising any voting rights in the target, (ii) receiving claims for profit distributions associated with the acquisition, and/or (iii) providing or otherwise disclosing company-related information to the acquirer (provided that such information relates to company divisions or corporate assets that are subject to the investment control proceeding), in each case prior to clearance by the BMWi.

12.2.8. International Medical Device Regulations

Outside of the European Union, regulatory pathways for the marketing of medical devices vary greatly from country to country. In many countries, local regulatory agencies conduct an independent review of IVD medical devices prior to granting marketing approval. For example, in China, approval by the NMPA must be obtained prior to marketing an IVD medical device. In Japan, approval by the Ministry of Health, Labor and Welfare following review by the Pharmaceuticals and Medical Devices Agency is required prior to marketing an IVD medical device. The process in such countries may be costly, lengthy and require the expenditure of significant resources, including the conduct of clinical trials to generate local data. In other countries, the regulatory pathway may be shorter and/or less costly. The timeline for the introduction of new IVD medical devices is heavily impacted by these various regulations on a country-by-country basis, which may become more lengthy and costly over time.

13. GENERAL INFORMATION ON EPIGENOMICS AG AND THE EPIGENOMICS GROUP

13.1. Formation, Incorporation, Entry in the Commercial Register, Commercial Name, Financial Year, Corporate Purpose and Registered Office

The Company was founded on April 30, 1997 as a German limited liability company (*GmbH*) under the legal name "O.N.M.L. Beteiligungs GmbH" with its seat in Frankfurt a.M., Germany, and a share capital (nominal capital) of DM 50,000.00 (Articles of Association, dated April 30, 1997). The Company was registered with the commercial register of the local court (*Amtsgericht*) Frankfurt a.M., Germany, under the number HRB 43193 on June 11, 1997.

By shareholders' resolution of November 6, 1998, the Company's legal name was changed to "Epigenomics GmbH" and its seat was moved to Berlin, Germany. The change was registered with the commercial register of the local court (*Amtsgericht*) Charlottenburg, Germany, on March 25, 1999, under HRB 70313.

By shareholders' resolution of February 25, 2000, entered into the commercial register on June 29, 2000, the Company was transformed into a stock corporation (*Aktiengesellschaft*). From this date on, the Company's legal name is "Epigenomics AG" and its commercial name is "Epigenomics". The Company is registered with the commercial register of the local court (*Amtsgericht*) Charlottenburg, Germany, under HRB 75861. The Company's LEI is 549300X1C4U862NDLN97.

As a German stock corporation, the Company is governed by German law. The financial year of Epigenomics AG is the calendar year. The current financial year is the full financial year beginning on January 1, 2021.

Pursuant to Section 2 para. 1 of the Articles of Association, the general purpose of the Company is the development and marketing of procedures and apparatus for the extraction of biological, diagnostic and pharmalogical parameters, in particular epigenetic parameters, for example, the DNA-methylation sample, and of the information technology bases required to create and evaluate these.

The Company can be contacted at Geneststraße 5, 10829 Berlin, Germany, by telephone: +49 30 24345 0, or via its website: www.epigenomics.com. Information contained on any website mentioned in the Prospectus, including our website, is not incorporated by reference in the Prospectus, is not part of the Prospectus, unless otherwise explicitly indicated, and has not been scrutinized or approved by BaFin.

13.2. History and Development of the Business

After the Company's foundation in 1997, it transformed into a stock corporation (*Aktiengesellschaft*) and changed its legal name to Epigenomics AG.

In 2000, Epigenomics AG acquired all shares of Seattle-based ORCA Biosciences, Inc. and renamed ORCA Biosciences, Inc. to Epigenomics, Inc.

On July 19, 2004, the Company went public.

Important milestones concerning the Company's future are the spreading and implementation of Epi proColon as an integral part of intestinal cancer screening, including its approval by the FDA in April 2016 and subsequent efforts in commercialization of Epi proColon in the United States.

13.3. Structure of the Epigenomics Group and Information on Major Holdings

The Company is the parent company of the consolidated Group and performs, among other things, all holding functions (such as controlling, financing and compliance) for the Group. In addition, the Company conducts an operating business which includes, in particular, research and development, as well as the marketing of its products. The consolidated Group consists of the Company and Epigenomics, Inc. (registered office: c/o BTA Legal, 31811 Pacific Highway South, B101, Federal Way, Washington 98003, United States), as its sole subsidiary in which the Company owns 100% of the share capital and the voting rights. Epigenomics Inc. additionally operates an office in Germantown, Maryland, United States and in San Diego, California, United States.

Epigenomics, Inc. is mainly active in developing our business and commercial activities in North America and in international markets outside of Europe, but also active in research and developing. It was granted an exclusive license from the Company to manufacture, distribute, promote, market, and sell Epi proColon in the United States, Canada and Mexico. Epigenomics, Inc. purchases products from the Company and pays royalties based on its Epi proColon net sales to the Company. In addition, Epigenomics, Inc. is obliged to additional milestone payments based on long-term cumulative net sales of the product.

Name and registered office	**Subscribed capital as of December 31, 2020 (in EUR thousand)[1]**	**Capital reserves as of December 31, 2020 (in EUR thousand)[1]**	**Receivables/(payables) of the Company towards affiliate as of December 31, 2020 (in EUR thousand)[1]**	**Annual profit/(loss) in the financial year ended December 31, 2020 (in EUR thousand)[2]**	**Dividends received by the Company in the financial year ended December 31, 2020 (in EUR thousand)[2]**
Epigenomics, Inc., Federal Way, WA, USA	0	3,334	5,000	(3,246)	0

[1] Converted from U.S. dollar at the applicable exchange rate as of December 31, 2020, *i.e.*, USD 1.2271 per EUR 1.0000.

[2] Converted from U.S. dollar at the average rate for the financial year 2020, *i.e.*, USD 1.1470 per EUR 1.0000.

13.4. Auditor

The Company appointed Baker Tilly as auditor of the Audited Consolidated Financial Statements 2020, 2019 and 2018 prepared in accordance with IFRS and of the Audited Unconsolidated Financial Statements 2020 prepared in accordance with the German Commercial Code (*Handelsgesetzbuch*).

Baker Tilly conducted its audits in accordance with Section 317 German Commercial Code (*Handelsgesetzbuch*) and German generally accepted standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer*) and issued an unqualified auditor's report (*uneingeschränkter Bestätigungsvermerk*). The audit reports for the financial year 2019 and the financial year 2020 contain the additional remark that the Company's ability to continue as a going concern is dependent on future cash inflows outside the operating business and further capital measures, respectively, see also pages F-102 to F-110 (Independent Auditor's Report to the Audited Consolidated Financial Statements 2019) and pages F-43 to F-51 (Independent Auditor's Report to the Audited Consolidated Financial Statements 2020), respectively, and *2.6. "General Information — Note on Financial Information"*.

Baker Tilly is member of the German Chamber of Auditors (*deutsche Wirtschaftsprüferkammer*) and member of the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer*).

13.5. Publications, Paying Agent, Designated Sponsor

In accordance with its Articles of Association, announcements of the Company are published in the German Federal Gazette (*Bundesanzeiger*).

Announcements in connection with the approval of the Prospectus or any supplements thereto are to be made in accordance with the regulations of Delegated Regulation (EU) 2019/979 and in the form of publications stipulated for in the Prospectus, in particular through publication on the Company's website (http://www.epigenomics.com/news-investors/).

The paying agent for the Shares is Deutsche Bank AG, Theodor-Heuss-Allee 70, 60486 Frankfurt a.M., Germany.

The designated sponsor of the Shares is Pareto Securities AS, Gräfstr. 97, 60487 Frankfurt a.M, Germany. Pursuant to the designated sponsor agreement between the designated sponsor and the Company, the designated sponsor, among other things, places limited buy and sell orders for the Shares in the electronic trading system of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) during regular trading hours. This is intended to ensure liquidity in the market for the Shares.

14. MAJOR SHAREHOLDERS

The German Securities Trading Act (*Wertpapierhandelsgesetz*) requires holders of shares in a listed stock corporation to which voting rights are attached or instruments which relate to such shares to notify the respective issuer and BaFin without undue delay of the level of their holdings if they reach, exceed or fall below certain thresholds. The initial threshold triggering a notification requirement is 3.0% of the voting rights of a stock corporation in the case of holdings in shares and 5.0% of the voting rights of a stock corporation in cases of instruments or cumulative holdings in shares and instruments (see *15.13. "Information on the Share Capital of Epigenomics AG and Applicable Regulations — Disclosure Requirements for Voting Rights*").

The Company has no controlling shareholder. Based on a voting rights notification published May 27, 2021, Wilhelm K. T. Zours indirectly (via Deutsche Balaton and other companies) controlled more than 20% of the Shares and voting rights resulting therefrom, and, as a result, Mr. Wilhelm K. T. Zours and Deutsche Balaton, are deemed to be related parties of the Company pursuant to Section 111a para. 1 sentence 2 AktG. The following table gives an overview of the natural persons and legal entities with notifiable holdings in the Company above the respective initial notification thresholds, as notified to the Company, recalculated on the basis of the absolute number of voting rights as of the date of the Prospectus.

	Voting Rights in %[1]		
Ultimate Controlling Person	**Shares[2]**	**Instruments**	**Total**
Wilhelm K. T. Zours[3]	23.93%	1.64%	23.93%
Markus Pfitzke[4]	9.65%	—	9.65%
Morgan Stanley[5]	4.78%	0.00%	4.78%
Roberto Mignone[6]	4.65%	—	4.65%
Jacob Gottlieb[7]	2.51%	—	2.51%

1 Percentages have been calculated throughout (including for instruments and total) on the basis of the absolute number of voting rights given in the respective voting rights notification divided by 12,232,303 shares outstanding as of the date of the Prospectus and, hence, may differ from the percentages shown in the respective voting rights notification. Because the Company has implemented several capital measures in recent times, to the extent that the latest voting rights notification of the respective shareholder was published prior to any such capital measures, the recalculation may have resulted in a calculatory dilution of the shown percentage of voting rights. However, if and to the extent that the respective shareholder has participated in the respective capital measure, his voting rights may be higher than shown in the table above.

2 Based on the respective voting rights notifications, all listed voting rights attached to shares are indirect voting rights pursuant to Section 34 German Securities Trading Act (Wertpapierhandelsgesetz).

3 Based on a voting rights notification published July 22, 2021; including attributed shares held by Heidelberger Beteiligungsholding AG (7.46%), which is an indirect subsidiary of Deutsche Balaton which itself held 11.10%.

4 Based on a voting rights notification published June 26, 2021.

5 Based on a voting rights notification published June 16, 2021; including attributed voting rights held by Morgan Stanley & Co. LLC (4.65%).

6 Based on a voting rights notification published May 27, 2021; including attributed voting rights held by Bridger Management LLC (4.65%).

7 Based on a voting rights notification published April 21, 2020; including attributed voting rights held by Altium Growth Fund, LP (2.51%) and Altium Capital Management, LP (2.51%).

15. INFORMATION ON THE SHARE CAPITAL OF EPIGENOMICS AG AND APPLICABLE REGULATIONS

15.1. Current Share Capital and Shares

As of the date of the Prospectus, the Company's share capital currently amounts to EUR 12,232,303.00 divided into 12,232,303 no-par value ordinary registered Shares, representing a notional portion of the share capital of EUR 1.00 each. Our share capital is denominated in euros and has been fully paid up. The Shares were created pursuant to German law. Since July 19, 2004, the Shares have been listed in the Prime Standard segment of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) (trading symbol: ECX).

15.1.1. Foundation and Capital Measures

On April 30, 1997, the Company was incorporated in the legal form of a limited liability company (*Gesellschaft mit beschränkter Haftung*) under German law with a share capital of DM 50,000.00. Since January 1, 2018, the Company's share capital has developed as follows:

- Based on the authorization to increase the share capital of the Company granted by resolution of the general shareholders' meeting of the Company held on May 30, 2018, the Company's share capital was increased by EUR 12,007,180.00 from EUR 24,014,360.00 to EUR 36,021,540.00. The capital increase was registered with the commercial register on October 24, 2018.

- Based on the authorization to increase the share capital of the Company granted by resolution of the general shareholders' meeting of the Company held on May 15, 2019, the Company's share capital was increased by EUR 7,506,152.00 from EUR 36,021,540.00 to EUR 43,527,692.00. The capital increase was registered with the commercial register on November 8, 2019.

- Based on the authorization to increase the share capital of the Company granted by resolution of the general shareholders' meeting of the Company held on May 15, 2019, the Company's share capital was increased by EUR 3,602,154.00 from EUR 43,527,692.00 to EUR 47,129,846.00. The capital increase was registered with the commercial register on April 2, 2020.

- By resolution of the general shareholders' meeting of the Company held on November 27, 2020, the Company's share capital was reduced by redemption of six Shares acquired by the Company free of charge from EUR 47,129,846.00 to EUR 47,129,840.00. By a further resolution of the general shareholders' meeting of the Company held on November 27, 2020, the Company's share capital was reduced by way of a consolidation of Shares from EUR 47,129,840.00 to EUR 5,891,230.00. Both capital reductions were registered with the commercial register on December 2, 2020.

- Based on the authorization granted by resolution of the general shareholders' meeting of the Company held on June 12, 2020, as amended by resolution of the extraordinary general shareholders' meeting of the Company held on November 27, 2020, on February 1, 2021, the Company issued the Mandatory Convertible Bonds 2021/2024 which convert into 5,000,000 Shares. In the first conversion window for the Mandatory Convertible Bonds 2021/2024 during the first 14 days of April 2021, Mandatory Convertible Bonds 2021/2024 in a nominal amount of EUR 4,357,606.00 were converted into 3,961,460 Shares, increasing the share capital of the Company by EUR 3,961,460.00 from EUR 5,891,230.00 to EUR 9,852,690.00.

- Based on the authorization to increase the share capital of the Company granted by resolution of the general shareholders' meeting of the Company held on June 12, 2020, the Company's share capital was increased by EUR 1,970,537.00 from EUR 9,852,690.00 to EUR 11,823,227.00. The capital increase was registered with the commercial register on May 19, 2021.
- In the second conversion window for the Mandatory Convertible Bonds 2021/2024 during the first 14 days of July 2021, Mandatory Convertible Bonds 2021/2024 in a nominal amount of EUR 440,682.00 were converted into 409,076 Shares, increasing the share capital of the Company by EUR 409,076.00 from EUR 11,823,227.00 to EUR 12,232,303.00.

15.1.2. Description of Shares

We have one series of Shares, which entitles holders to equal voting rights in our Company. Each Share entitles the shareholder to one vote at the general shareholders' meeting of the Company. There are no restrictions on voting rights. Voting rights are the same for all of the Company's shareholders. Voting rights, however, do not attach until the respective capital contribution has been fully paid up. In the event of the Company's liquidation, the Company's assets remaining after satisfaction of all liabilities of the Company will be distributed to the shareholders in proportion to their interest in the Company's share capital.

As of the date of the Prospectus, the Company and its subsidiary hold no Shares.

15.2. Certification and Transferability of the Shares

The form of the share certificates, the dividend coupons and the renewal coupons, if any, are determined by the Executive Board with the approval of the Supervisory Board. The Company is entitled to issue share certificates embodying individual Shares or multiples of Shares. Section 6 para. 2 of the Articles of Association stipulates that the shareholders' right to the issuance of share certificates representing their respective Shares shall be excluded to the extent legally permissible, unless such issuance is required in accordance with regulations applicable at a stock exchange to which the Shares are admitted for trading.

The Shares are represented by global share certificates without dividend coupons, which are deposited with Clearstream.

There are no restrictions on the transferability of the Shares.

15.3. Authorized Capital

15.3.1. Authorized Capital 2020/I

The Executive Board, with the consent of the Supervisory Board, is authorized to increase the Company's share capital on one or more occasions until June 11, 2025 by up to a total of EUR 4,712,984.00 in cash and/or in kind by issuing new registered no-par value shares ("**Authorized Capital 2020/I**"). The shareholders shall be granted subscription rights. The new shares may also be subscribed by one or more banks or companies operating in accordance with Section 53 para. 1 sentence 1 or Section 53b para. 1 sentence 1 or para. 7 German Banking Act (*Kreditwesengesetz*) with the obligation to offer them to the shareholders (indirect subscription right). However, the Executive Board is authorized, with the approval of the Supervisory Board, to exclude the statutory subscription right of shareholders in the following cases:

- For fractional amounts;

- if the new shares are issued according to Section 186 para. 3 sentence 4 German Stock Corporation Act (*Aktiengesetz*) against cash contributions at an issue price that is not significantly lower than the stock market price of the shares already listed on the stock exchange and the new shares' proportionate amount of the share capital does not exceed ten percent (10%) of the share capital at the time this authorization is entered in the commercial register or - if lower - at the time the authorization is exercised. The 10% limit shall include any other shares that may have been newly issued by the Company during the term of this authorization under exclusion of subscription rights in accordance with Section 186 para. 3 sentence 4 German Stock Corporation Act (*Aktiengesetz*) or in accordance with Section 203 in conjunction with Section 186 para. 3 sentence 4 German Stock Corporation Act (*Aktiengesetz*) as part of a cash capital increase or sold in accordance with Section 71 para. 1 no. 8 German Stock Corporation Act (*Aktiengesetz*) in conjunction with Section 186 para. 3 sentence 4 German Stock Corporation Act (*Aktiengesetz*) after repurchase. The 10% limit shall also include shares for which an option or conversion right, an option or conversion obligation or a share delivery right exists in favor of the Company due to bonds with warrants or convertible bonds, profit participation rights or combinations of these instruments issued during the term of this authorization under exclusion of subscription rights pursuant to Section 221 para. 4 sentence 2 in conjunction with Section 186 para. 3 sentence 4 German Stock Corporation Act (*Aktiengesetz*) by the Company or a subsidiary of the Company within the meaning of Section 17 German Stock Corporation Act (*Aktiengesetz*); and

- to the extent necessary to grant holders or creditors of bonds with warrants or convertible bonds, profit-participation rights or combinations of these instruments that have been or will be issued by the Company or a subsidiary of the Company within the meaning of Section 17 German Stock Corporation Act (*Aktiengesetz*) a subscription right to new shares to the extent to which they would be entitled after exercising the option or conversion rights or after exercising share delivery rights or fulfilling option or conversion obligations.

The Executive Board, with the consent of the Supervisory Board, is further authorized to determine the profit participation of the new shares in deviation from Section 60 para. 2 German Stock Corporation Act (*Aktiengesetz*) and to determine the further details of the implementation of capital increases from the Authorized Capital 2020/I. The Supervisory Board is authorized to amend the wording of the Articles of Association in each case after implementation of an increase in the share capital from the Authorized Capital 2020/I in accordance with the scope of the respective increase in the share capital or after expiry of the authorization period.

15.3.2. Authorized Capital 2020/II

The Executive Board, with the consent of the Supervisory Board, is authorized to increase the Company's share capital on one or more occasions until June 11, 2025 by up to a total of EUR 18,851,939.00 in return for cash contributions and/or contributions in kind by issuing new no-par value registered shares ("**Authorized Capital 2020/II**"). The shareholders shall be granted subscription rights. The Company shall organize stock exchange trading of the subscription rights. The new shares may also be subscribed by one or more credit institutions or companies operating in accordance with Section 53 para. 1 sentence 1 or Section 53b para. 1 sentence 1 or para. 7 German Banking Act (*Kreditwesengesetz*) with the obligation to offer them to the shareholders for subscription (indirect subscription right). However, the Executive Board is authorized, with the approval of the Supervisory Board, to exclude the shareholders' statutory subscription right for fractional amounts. The Executive Board is also authorized, with the approval of the Supervisory Board, to determine the profit participation of the new shares in deviation from Section 60 para. 2 German Stock Corporation Act (*Aktiengesetz*) and to determine the further details of the

implementation of capital increases from the Authorized Capital 2020/II. The Supervisory Board is authorized to amend the wording of the Articles of Association in each case after implementation of an increase of the share capital from the Authorized Capital 2020/II in accordance with the scope of the respective increase of the share capital or after expiry of the authorization period.

In May 2021, we issued 1,970,537 Shares from the Authorized Capital 2020/II (see *15.1.1. "— Current Share Capital and Shares — Foundation and Capital Measures*"). As the date of the Prospectus, the remaining amount available under the Authorized Capital 2020/II thus totals EUR 16,881,402.00.

15.4. Conditional Capital

15.4.1. Conditional Capital XI

The Company's share capital is conditionally increased by up to EUR 1,000,000.00 by issuance of up to 1,000,000 new shares ("**Conditional Capital XI**"). This conditional capital increase will only be implemented to the extent that subscription rights were issued under the SOP 16-18 (as defined in *16.5.1. "Governing Bodies — Stock Option Programs — Terms of Stock Option Programs"*) prior to the end of April 30, 2018, the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares will be issued against payment of the respective exercise price to be determined in accordance with the resolution on the SOP 16-18 by the general shareholders' meeting held on May 25, 2016.

The newly issued Shares carry dividend rights from the commencement of the financial year in which they are issued. The Executive Board is authorized, as far as legally permissible and with the consent of the Supervisory Board, to determine that, if no resolution on the allocation of the profit of the financial year immediately preceding the year of the issuance of the new shares has been adopted when the new shares are issued, the new shares shall carry dividend rights from the commencement of the financial year immediately preceding the year of the issuance; if the new shares are issued to members of the Executive Board, the Supervisory Board shall be authorized to do so. The Supervisory Board is also authorized to determine the further details of the implementation of the conditional capital increase where the granting of subscription rights to members of the Executive Board is concerned. In all other cases and subject to the terms of the SOP 16-18, the Executive Board is authorized to determine these details.

15.4.2. Conditional Capital XII

The Company's share capital is conditionally increased by up to EUR 1,000,000.00 by issuance of up to 1,000,000 new shares ("**Conditional Capital XII**"). This conditional capital increase will only be implemented to the extent that subscription rights were issued under the SOP 17-19 (as defined in *16.5.1. "Governing Bodies — Stock Option Programs — Terms of Stock Option Programs"*) prior to the end of May 31, 2019, the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares will be issued against payment of the respective exercise price to be determined in accordance with the resolution on the SOP 17-19 by the general shareholders' meeting held on May 30, 2017.

The newly issued Shares carry dividend rights from the commencement of the financial year in which they are issued. The Executive Board is authorized, as far as legally permissible and with the consent of the Supervisory Board, to determine that, if no resolution on the allocation of the profit of the financial year immediately preceding the year of the issuance of the new shares has been

adopted when the new shares are issued, the new shares shall carry dividend rights from the commencement of the financial year immediately preceding the year of the issuance; if the new shares are issued to members of the Executive Board, the Supervisory Board shall be authorized to do so. The Supervisory Board is also authorized to determine the further details of the implementation of the conditional capital increase where the granting of subscription rights to members of the Executive Board is concerned. In all other cases and subject to the terms of the SOP 17-19, the Executive Board is authorized to determine these details.

15.4.3. Conditional Capital XIII

The Company's share capital is conditionally increased by up to EUR 1,000,000.00 by issuance of up to 1,000,000 new shares ("**Conditional Capital XIII**"). This conditional capital increase will only be implemented to the extent that subscription rights are issued under the SOP 19-21 (as defined in *16.5.1. "Governing Bodies — Stock Option Programs — Terms of Stock Option Programs"*) prior to the end of May 31, 2021, the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares will be issued against payment of the respective exercise price to be determined in accordance with the resolution on the SOP 19-21 by the general shareholders' meeting held on May 15, 2019.

The newly issued shares carry dividend rights from the commencement of the financial year in which they are issued. The Executive Board is authorized, as far as legally permissible and with the consent of the Supervisory Board, to determine that, if no resolution on the allocation of the profit of the financial year immediately preceding the year of the issuance of the new shares has been adopted when the new shares are issued, the new shares shall carry dividend rights from the commencement of the financial year immediately preceding the year of the issuance; if the new shares are issued to members of the Executive Board, the Supervisory Board shall be authorized to do so. The Supervisory Board is also authorized to determine the further details of the implementation of the conditional capital increase where the granting of subscription rights to members of the Executive Board is concerned. In all other cases and subject to the terms of the SOP 19-21, the Executive Board is authorized to determine these details.

15.4.4. Conditional Capital XIV

The Company's share capital is conditionally increased by up to EUR 20,564,923.00 by issuance of up to 20,564,923 new shares ("**Conditional Capital XIV**"). This conditional capital increase serves the purpose of granting Shares to the holders or creditors of bonds or participation rights issued by the Company, or by a group company of the Company within the meaning of Section 18 German Stock Corporation Act (*Aktiengesetz*) in which the Company has a direct and/or indirect holding of at least 90% ("**Subordinated Group Company**"), either (i) on the basis of the authorization resolution of the general shareholders' meeting held on June 12, 2020 (see *15.5.1. "— Authorization to Issue Convertible Bonds — Authorization 2020/I"*), prior to the end of June 11, 2025, or (ii) on the basis of the authorization resolution of the general shareholders' meeting held on November 27, 2020 (see *15.5.2. "— Authorization to Issue Convertible Bonds — Authorization 2020/II"*), prior to the end of March 31, 2021, in each case if option or conversion rights are exercised, if option or conversion obligations are fulfilled or if the Company exercises its optional right to deliver Shares instead of payment of the cash amount due (or parts thereof).

Accordingly, the conditional capital increase will only be implemented

- if bonds or participation rights are issued in accordance with the authorization resolution of the general shareholders' meeting held on June 12, 2020, and only to the extent that

- option or conversion rights are exercised;
- holders or creditors of bonds or participation rights who are under an obligation to exercise an option or under a conversion obligation fulfill their obligation to exercise the option or their conversion obligation; or
- the Company exercises its optional right to deliver Shares instead of paying the cash amount due (or parts thereof); or

- if bonds are issued in accordance with the authorization resolution of the general shareholders' meeting held on November 27, 2020, and only to the extent that
  - conversion rights are exercised; or
  - holders or creditors of bonds who are under a conversion obligation fulfill their obligation to exercise the option or their conversion obligation,

in each case to the extent that no cash settlement is granted and no shares from an authorized capital, treasury shares or shares of another listed company are delivered.

The new shares will be issued at the respective option or conversion price in accordance with the respective authorization resolution.

The newly issued Shares carry dividend rights from the commencement of the financial year in which they are issued. The Executive Board is authorized, as far as legally permissible and with the consent of the Supervisory Board, to determine that, if no resolution on the allocation of the profit of the financial year immediately preceding the year of the issuance of the new shares has been adopted when the new shares are issued, the new shares shall carry dividend rights from the commencement of the financial year immediately preceding the year of the issuance. The Executive Board is also authorized, with the consent of the Supervisory Board, to determine the further details of the implementation of the conditional capital increase.

As a result of conversion of Mandatory Convertible Bonds 2021/2024 in the first and second conversion windows in first 14 days in April and July 2021, respectively, an aggregate of 4,370,536 Shares were issued from the Conditional Capital XIV (see *15.1.1. "— Current Share Capital and Shares — Foundation and Capital Measures*"). As of the date of the Prospectus, the remaining amount available under the Conditional Capital XIV thus totals EUR 16,194,387.

15.5. Authorization to Issue Convertible Bonds

15.5.1. Authorization 2020/I

15.5.1.1. Term of Authorization, Nominal Amount, Term, Number of Shares and Further Specifications of the Bonds and/or Participation Rights

Pursuant to a resolution of the general shareholders' meeting of the Company held on June 12, 2020, the Executive Board is authorized until June 11, 2025, with the consent of the Supervisory Board, to issue once or several times, also simultaneously in several tranches, bearer or registered bonds with warrants, convertible bonds, participation rights or combinations of these instruments in an aggregate nominal amount of up to EUR 150,000,000.00 with or without a fixed term and to grant option rights to the holders or creditors of bonds with warrants and/or participation rights with warrants and grant conversion rights to the holders or creditors of convertible bonds and/or convertible participation rights for up to a total of 20,564,923 no-par value registered shares of the Company representing an aggregate notional portion of the share capital of the Company of up to

EUR 20,564,923.00 as further specified in the terms and conditions of these bonds or participation certificates ("**Authorization 2020/I**").

The terms and conditions of the bonds or participation certificates may, instead of conversion or option rights for the holders or creditors of the bonds or participation certificates, within the scope set forth above, provide for (i) an obligation to exercise an option or conversion right at the end of the term or at another point in time (or event) or (ii) the right of the Company, upon maturity of the bonds or participation rights (in particular upon final maturity or maturity due to the exercise of a termination right), to grant to the holders or creditors no-par value shares of the Company or another listed company instead of the payment of the cash amount due (or parts thereof) (*share delivery right*). The bonds or participation rights may, in addition to euros, be issued in the legal currency of another country, limited to the corresponding value expressed in euro. They may also be issued by a Subordinated Group Company. In such case, the Executive Board is authorized to assume, subject to Supervisory Board approval, the guarantee on behalf of the Company for the bonds or participation rights and to grant to the holders or creditors option or conversion rights for no-par value registered shares of the Company or to agree on option or conversion obligations or a share delivery right.

The bonds shall be divided into notes (*Teilschuldverschreibungen*).

15.5.1.2. Subscription Right; Exclusion of Subscription Right

The bonds, to the extent that they provide for option or conversion rights, option or conversion obligations or a share delivery right for the delivery of shares of the Company, and the participation rights shall be offered to the shareholders for subscription. The statutory subscription right may also be granted to the shareholders in such a manner that the bonds and/or participation rights will be underwritten by one or more credit institutions or by one or more companies operating in accordance with Section 53 para. 1 sentence 1 and/or Section 53b para. 1 sentence 1 or para. 7 German Banking Act (*Kreditwesengesetz*) subject to the obligation to offer the bonds and/or participation rights to the shareholders for subscription (indirect subscription right). If the bonds or participation rights are issued by a Subordinated Group Company, the Company must ensure that the statutory subscription rights are granted to the shareholders of the Company in accordance with the two preceding sentences. However, the Executive Board is authorized, with the consent of the Supervisory Board, to exclude the shareholders' subscription rights in the following circumstances:

- for any fractional amounts resulting from the subscription ratio; and
- to the extent required to grant a subscription right to the holders or creditors of previously issued bonds with warrants, convertible bonds or participation rights or combinations of these instruments (and/or bonds or participation rights with a share delivery right for the delivery of shares of the Company) in an amount to which such holders or creditors would be entitled as shareholders after the exercise of the option or conversion rights, or in case of the fulfillment of obligations to exercise option or conversion rights, or after the exercise of a share delivery right.

15.5.1.3. Option Right; Conversion Ratio

If bonds with warrants or participation rights with warrants are issued, one or more warrants will be attached to each note or each participation certificate which entitle or oblige – including under a share delivery right – the holders or creditors to subscribe for no-par value registered shares of the Company as further specified by the terms and conditions of the bonds or participation certificates determined by the Executive Board. The terms and conditions of the bonds or participation certificates may provide that the option price may also be paid by way of transfer of notes and/or participation certificates or by offsetting against the claim for repayment under the notes and/or the

participation rights and, if appropriate, an additional cash payment (respectively an agio) or an option premium in cash. Any fractions of shares may, if so provided for in the terms and conditions of the bond and/or participation certificates, be added up for the subscription of whole shares, against additional payment if necessary.

If convertible bonds or convertible participation rights are issued, the holders of bearer bonds or bearer participation certificates or, otherwise, the creditors of the notes and/or participation certificates, have the indefeasible right or – including based on a share delivery right – the obligation to convert their notes and/or participation certificates as further specified in the terms and conditions of the bonds and/or participation certificates determined by the Executive Board into no-par value registered shares of the Company or, as the case may be, to take delivery of such shares. The conversion ratio is determined by dividing the nominal amount by the conversion price determined for one no-par value registered share of the Company. If the issue price of a note or a participation certificate is below its nominal amount, the conversion ratio may also be determined by dividing the issue price by the conversion price determined for one no-par value registered share of the Company. For the calculation of the conversion ratio, an additional cash payment (respectively an agio to be paid in cash) or a cash conversion premium may be added to the nominal amount or the issue price of a note or participation certificate. The terms and conditions of the bonds and/or participation certificates may provide for a variable conversion ratio and for the conversion price being determined (subject to the minimum price as described below) depending on the development of the stock price of the Company during the term of the bond and/or participation right. The conversion ratio may in any event be rounded up or down to the next whole number; also in this case an additional payment (or an agio) or a conversion premium, in each case payable in cash, may be determined. Also, it may be provided that fractional amounts resulting from the conversion ratio that cannot be converted are consolidated and/or settled in cash. Section 9 para. 1 and Section 199 para. 2 German Stock Corporation Act (*Aktiengesetz*) remain unaffected.

15.5.1.4. Option and Conversion Price; Anti-Dilution Protection

If a subscription right is granted or if the subscription right is only excluded for fractional amounts, the option or conversion price to be determined for a no-par value share of the Company must at least be equal to 70% of the non-weighted average closing share price of the shares of the Company as quoted in the electronic trading system of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) (i) during the subscription period, except for those days which are necessary to timely announce the option or conversion price pursuant to Section 186 para. 2 sentence 2 German Stock Corporation Act (*Aktiengesetz*), or, (ii) if the Executive Board determines and announces the option or conversion price already at an earlier point in time, during the last ten trading days preceding the day of the Executive Board's resolution on the determination of the option or conversion price.

If the subscription right is not only excluded for fractional amounts, the option or conversion price to be determined in each case for a no-par value share of the Company must – subject to the provisions hereinafter – be equal to at least 110% and if the term of the bond or the participation right is more than 18 months at least 120% of the non-weighted average closing share price of the no-par value shares of the Company as quoted in the electronic trading system of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) on the ten trading days preceding the day when the Executive Board has adopted the resolution to issue the bonds and/or participation rights.

If an option or conversion obligation or a share delivery right in respect of shares of the Company is provided for, the option or conversion price – as further specified in the terms and conditions of the bond and/or participation certificates – can amount to 70% or more of the non-weighted average closing share price of the Company as quoted in the electronic trading system of the Frankfurt Stock

Exchange (*Frankfurter Wertpapierbörse*) on the ten trading days preceding the day of final maturity or, as the case may be, another specified point in time, even if the price resulting therefrom is lower than the minimum price calculated pursuant to the preceding two paragraphs, however, in case the subscription right is not only excluded for fractional amounts, to at least 110% and if the term of the bond or the participation right is more than 18 months to at least 120% of the non-weighted average closing share price of the no-par value shares of the Company as quoted in the electronic trading system of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) on the ten trading days preceding the day when the Executive Board has adopted the resolution to issue the bonds and/or participation rights.

The pro rata amount of the share capital attributable in respect of each note or participation certificate to the no-par value shares of the Company to be issued thereunder must not exceed the nominal amount of the note and/or participation certificate including, if applicable, an additional cash payment (or a share premium paid upon issue) or a cash option or conversion premium. Section 9 para. 1 and Section 199 para. 2 German Stock Corporation Act (*Aktiengesetz*) remain unaffected. Notwithstanding Section 9 para. 1 German Stock Corporation Act (*Aktiengesetz*), the option or conversion price may be reduced pursuant or analogously to Section 216 para. 3 German Stock Corporation Act (*Aktiengesetz*) based on an anti-dilution provision as further specified in the terms and conditions of the bonds and/or participation certificates to preserve the rights of the holders and/or creditors of the bond and/or participation rights if the Company, during the option or conversion period, (i) increases its share capital by way of a capital increase from the Company's reserves and the issue of new shares, (ii) increases its share capital or sells treasury shares granting an exclusive subscription right to its shareholders (notwithstanding a possible exclusion of subscription rights for fractional amounts) or (iii) while granting an exclusive subscription right to its shareholders (in each case notwithstanding a possible exclusion of subscription rights for fractional amounts) issues, grants or guarantees additional bonds or participation rights with option or conversion rights or with the obligation to exercise an option or conversion or with a share delivery right in respect of shares of the Company, and if, in the cases referred to in (i) to (iii), the holders or creditors of already existing option or conversion rights or the debtors of already existing option or conversion obligations or share delivery rights in respect of shares of the Company are not granted the subscription rights they would have been entitled to by statute following the exercise of the option or conversion right or fulfillment of the option or conversion obligation, or the exercise of the share delivery right by the Company. The option or conversion price may, to the extent legally permissible, also be reduced by a cash payment upon the exercise of the option or conversion right or the share delivery right or the fulfillment of the option or conversion obligation. To the extent required to protect against dilution, the terms and conditions of the bond and/or participation certificates may in the aforementioned cases also provide for an adjustment of the number of the option or conversion rights or obligations or share delivery rights per note or participation certificate, as applicable.

The terms and conditions of the bonds and/or participation certificates may also provide for an adjustment of the option or conversion rights or obligations or share delivery rights in respect of shares of the Company and/or the number of option or conversion rights or, as the case may be, conversion obligations or, as the case may be, share delivery rights per partial bond or, as the case may be, per participation certificate in the event that the Company's capital is reduced, the Company's capital is increased under (partial or complete) exclusion (not only for fractional amounts) of the shareholders' subscription right, or other extraordinary measures are taken or events occur resulting in economic dilution of the value of the option or conversion rights or obligations or share delivery rights (*e.g.*, third parties gaining control of the Company). Section 9 para. 1 and Section 199 para. 2 German Stock Corporation Act (*Aktiengesetz*) remain unaffected.

15.5.1.5. Further Provisions

The terms and conditions of the bonds and/or participation certificates may provide that, if the option or conversion is exercised, the Company shall be entitled – instead of granting new no-par value shares – to pay a cash amount for each share otherwise to be delivered, which is equal to the non-weighted average closing share price of the no-par value shares of the Company in the electronic trading system of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) during the ten trading days following the day on which the declaration of exercise of the option or conversion was made.

The terms and conditions of the bond and/or participation certificates may also provide that, instead of conversion into new shares from conditional capital, the bonds and/or participation rights may, at the option of the Company, be converted into existing shares of the Company or shares of another listed company or that the option right may be fulfilled or, where an option obligation or a share delivery right is provided for, such obligation may be discharged by delivering such shares.

The Executive Board is authorized, with the consent of the Supervisory Board, to determine the further details concerning the issuance and features of the bonds and/or participation rights, in particular, interest rate, issue amount, determination of an option or conversion premium to be paid in cash, term and denomination, subscription and/or conversion ratio, creation of an option or conversion obligation or of a share delivery right, settlement or consolidation of fractional amounts, cash payment instead of delivery of shares, anti-dilution provisions, option and conversion period, seniority and a possible sharing of losses, as well as, within the aforementioned range, the option and/or conversion price and the issue price of the new shares, and to provide for a subscription right of the holders or creditors of the bonds or participation rights in the event that the Company or a Subordinate Group Company issues additional bonds or participation rights with option or conversion rights or obligations or a share delivery right for delivery of shares of the Company, or, as the case may be, to determine any such details in coordination with the competent bodies of the Subordinate Group Company issuing the bonds and/or participation rights.

15.5.1.6. Use of Authorization 2020/I

Based on the Authorization 2020/I, on June 11, 2021 and on August 23, 2021, the Executive Board, in each case with consent of the Supervisory Board, resolved to issue the New Bonds in the aggregate principal amount of up to EUR 16,500,000.00 against cash contributions at the Subscription Price per New Bond. For details on the New Bonds, see *4.1. "Information about the Securities — Information about the New Bonds"*.

15.5.2. Authorization 2020/II

15.5.2.1. Term of Authorization, Nominal Amount, Term, Number of Shares and Further Specifications of the Bonds and/or Participation Rights

Pursuant to a resolution of the general shareholders' meeting of the Company held on November 27, 2020, the Executive Board is authorized in the period until March 31, 2021, with the consent of the Supervisory Board, to issue once convertible bonds in an aggregate nominal amount of up to EUR 5,500,000.00 at their nominal amount and to grant conversion rights to the holders or creditors of convertible bonds for up to a total of 5,000,000 no-par value registered shares of the Company representing an aggregate notional portion of the share capital of the Company of up to EUR 5,000,000.00 as further specified in the terms and conditions of the bonds ("**Authorization 2020/II**").

A conversion by the holders or creditors of the bonds is possible within the first 14 calendar days of each calendar quarter, for the first time in the period from April 1, 2021 to April 14, 2021. If the last day of such 14-calendar day period is a Saturday, Sunday or public holiday in Berlin, Hamburg

and/or Frankfurt am Main, the period will end upon expiry of the first subsequent day which is not a Saturday, Sunday or public holiday in Berlin, Hamburg and/or Frankfurt am Main. The terms and conditions of the bonds may provide for further conversion rights of the holders or creditors of the bonds (also prior to April 1, 2021).

In addition to conversion rights of the holders or creditors of the bonds to the above extent, the terms and conditions of the bonds will also provide for a conversion obligation at the end of the term or at a point in time during the last three months of the term of the convertible bonds. The bonds will not bear interest (zero coupon). Their term is at least two years and eleven months and at a maximum three years and three months. They are structured in such a way that they are not taken into account as liabilities for the purposes of Section 19 German Insolvency Act (*Insolvenzordnung*) (over-indebtedness).

The bonds shall be divided into notes (*Teilschuldverschreibungen*).

The bonds will not be admitted to trading on a regulated market.

15.5.2.2. Subscription Right; Exclusion of Subscription Right

The bonds, to the extent that they provide for conversions rights or obligations, shall be offered to the shareholders for subscription (under reservation of an exclusion for fractional amounts). The statutory subscription right may also be granted to the shareholders in such a manner that the bonds will be underwritten by one or more credit institutions or by one or more companies operating in accordance with Section 53 para. 1 sentence 1 and/or Section 53b para. 1 sentence 1 or para. 7 German Banking Act (*Kreditwesengesetz*) subject to the obligation to offer the bonds and/or participation rights to the shareholders for subscription (indirect subscription right).

However, the Executive Board is authorized, with the consent of the Supervisory Board, to exclude the shareholders' subscription rights for any fractional amounts resulting from the subscription ratio.

In addition to the subscription right, the shareholders shall be granted an oversubscription right.

15.5.2.3. Conversion Ratio

The holders of bearer bonds or, otherwise, the creditors of the notes, have the indefeasible right or – as the case may be – the obligation to convert their notes into no-par value registered shares of the Company, as further specified in the terms and conditions of the bonds determined by the Executive Board in accordance with this authorization.

The conversion ratio is determined by dividing the nominal amount by the conversion price of EUR 1.10 determined for one no-par value registered share of the Company. The conversion ratio may in any event be rounded up or down to the next whole number. Also, it may be provided that fractional amounts resulting from the conversion ratio that cannot be converted are consolidated and/or settled in cash.

Section 9 para. 1 and Section 199 para. 2 German Stock Corporation Act (*Aktiengesetz*) remain unaffected.

15.5.2.4. Conversion Price; Anti-Dilution Protection

The conversion price for one no-par value registered share of the Company amounts to EUR 1.10.

Notwithstanding Section 9 para. 1 German Stock Corporation Act (*Aktiengesetz*), the conversion price may be reduced pursuant or analogously to Section 216 para. 3 German Stock Corporation Act (*Aktiengesetz*) based on an anti-dilution provision as further specified in the terms and conditions of the bonds to preserve the rights of the holders and/or creditors of the bonds if the Company, during the term of the bonds, (i) increases its share capital by way of a capital increase from the

Company's reserves and the issue of new shares, or (ii) increases its share capital or sells treasury shares granting an exclusive subscription right to its shareholders (in each case notwithstanding a possible exclusion of subscription rights for fractional amounts) or (iii) while granting an exclusive subscription right to its shareholders (in each case notwithstanding a possible exclusion of subscription rights for fractional amounts) issues, grants or guarantees additional bonds with conversion rights or with the obligation to exercise a conversion or with a share delivery right in respect of shares of the Company, and if, in the cases referred to in (i) to (iii), the holders or creditors of already existing conversion rights or the debtors of already existing conversion obligations in respect of shares of the Company are not granted the subscription rights they would have been entitled to by statute following the exercise of the conversion right or fulfillment of the conversion obligation. The conversion price may, to the extent legally permissible, also be reduced by a cash payment upon the exercise of the conversion right or the fulfillment of the conversion obligation. To the extent required to protect against dilution, the terms and conditions of the bonds may in the aforementioned cases also provide for an adjustment of the number of the option or conversion rights or obligations or share delivery rights per note, as applicable.

The terms and conditions of the bonds may also provide for an adjustment of the conversion rights or obligations and/or the number of conversion rights or, as the case may be, conversion obligations in relation to the notes in the event that the Company's capital is reduced, the Company's capital is increased under (partial or complete) exclusion (not only for fractional amounts) of the shareholders' subscription right, or other extraordinary measures are taken or events occur resulting in economic dilution of the value of the option or conversion rights or obligations or share delivery rights (*e.g.*, third parties gaining control of the Company). Section 9 para. 1 and Section 199 para. 2 German Stock Corporation Act (*Aktiengesetz*) remain unaffected.

There will be no adjustment in the event of the resolution and implementation of the capital reductions proposed under agenda items 3 and 4 of the extraordinary general shareholders' meeting held on November 27, 2020 (see *15.1.1. "— Current Share Capital and Shares — Foundation and Capital Measures*").

15.5.2.5. Further Provisions

The Executive Board is authorized, with the consent of the Supervisory Board and within the framework of the authorization, to determine the further details concerning the issuance and features of the bonds, in particular, exact term and denomination, subscription and/or conversion ratio, settlement or consolidation of fractional amounts, anti-dilution provisions, seniority and a possible sharing of losses, as well as, to provide for a subscription right of the holders or creditors of the bonds in the event that the Company or a Subordinated Group Company issues additional bonds or participation rights with option or conversion rights or obligations or a share delivery right for delivery of shares of the Company, or, as the case may be, to determine any such details in coordination with the competent bodies of the Subordinated Group Company issuing the bonds and/or participation rights.

15.5.2.6. Use of Authorization 2020/II

On January 7, 2021, the Executive Board, with consent of the Supervisory Board, resolved to issue convertible bonds in an aggregate nominal amount of up to EUR 5,500,000.00 pursuant to the Authorization 2020/II. During the subscription period for existing shareholders from January 13, 2021 until January 27, 2021, subscription rights and oversubscription rights were exercised for the full aggregate nominal amount of offered convertible bonds. Accordingly, on February 1, 2021, convertible bonds in an aggregate amount of EUR 5,500,000.00 were issued. For a description of the terms of the bonds, see *11.1. "Material Agreements — Mandatory Convertible Bonds 2021/2024"*.

15.6. Authorization to Acquire and Use Treasury Shares

We may not acquire Shares unless authorized by the general shareholders' meeting or in other very limited circumstances as set out in the German Stock Corporation Act (*Aktiengesetz*). Shareholders may not grant a share repurchase authorization for a period of more than five years. The rules of the German Stock Corporation Act (*Aktiengesetz*) generally limit repurchases to 10% of the Company's share capital and re-sales must generally be made either on a stock exchange, in a manner that treats all shareholders equally or in accordance with the rules that apply to subscription rights relating to a capital increase.

Currently, the general shareholders' meeting of the Company has not granted an authorization to acquire treasury shares.

15.7. General Rules on Allocation of Profits and Dividend Payments

Shareholders have a share in the Company's distributable profits determined in proportion to their interest in the Company's share capital. The participation in the profits of Shares issued in a capital increase may be determined in a deviating manner.

Distributions of dividends on Shares for a given financial year are generally determined by the Executive Board and the Supervisory Board submitting a proposal for the distribution of dividends to the ordinary general shareholders' meeting held in the subsequent financial year. The general shareholders' meeting then adopts a resolution on such distribution without being bound by the proposal of the Executive Board and the Supervisory Board. Under the Articles of Association, the general shareholders' meeting may, to the extent legally permissible, approve non-cash dividends in addition to, or instead of, cash dividends.

Under German law, resolutions regarding the distribution of dividends can only be adopted based on the distributable profits (*Bilanzgewinn*) shown in the Company's audited unconsolidated financial statements in accordance with the German Commercial Code (*Handelsgesetzbuch*). The audited unconsolidated financial statements of the Company are prepared by the Executive Board and approved by the Supervisory Board, unless the Executive Board and the Supervisory Board refer the approval to the general shareholders' meeting. In determining the distributable profits, the profit or loss for the financial year is adjusted for profits or losses carried forward from previous financial years, as well as for withdrawals from and transfers to reserves. Certain reserves are required to be formed by law and must be deducted when calculating the distributable profits. Subject to certain statutory restrictions, the general shareholders' meeting is entitled to transfer additional amounts to the reserves or carry them forward.

If the Executive Board and the Supervisory Board approve the annual financial statements, they may, pursuant to the Articles of Association, transfer the net profit for the year, which remains after deduction of the amounts to be transferred to the statutory reserve and any loss carried forward, to other profit reserves in whole or in part. The transfer of more than half of the net profit for the year shall not be permitted if the other profit reserves exceed half the amount of the Company's share capital or would do so following the transfer.

Dividends will be paid out in accordance with the rules of the clearing system of Clearstream. Details on dividend payments and the respective payment agent will be published in the German Federal Gazette (*Bundesanzeiger*). Neither German law nor the Articles of Association provide for a special procedure for the exercise of dividend rights by shareholders not resident in Germany. Under German law, the right to dividend payments is generally time-barred after three years for the benefit of the Company.

15.8. General Provisions Governing a Liquidation of the Company

Besides liquidation as a result of insolvency proceedings, the Company may be liquidated by a resolution of the general shareholders' meeting to dissolve the Company followed by a liquidation procedure. The resolution of the general shareholders' meeting requires a simple majority of the votes cast, as well as a majority of at least three quarters of the share capital represented at the time the resolution is adopted. Pursuant to the German Stock Corporation Act (*Aktiengesetz*), in the event of liquidation, the assets remaining after all Company liabilities have been satisfied are distributed among the shareholders in proportion to their interest in the Company's share capital. Certain restrictions, in particular restrictions for the benefit of creditors, must be observed.

15.9. General Provisions Governing a Change in the Share Capital

The share capital of the Company may be increased against cash contributions or against contributions in kind by a resolution of the general shareholders' meeting. According to the German Stock Corporation Act (*Aktiengesetz*), such resolution requires a simple majority of the votes cast, as well as a majority of at least three quarters of the share capital represented at the time the resolution is adopted. However, Section 18 para. 4 of the Articles of Association generally provides that a simple majority of the votes cast and, in cases where the majority of the share capital represented during the adoption of the resolution is required by statutory law, the simple majority of the represented share capital shall be sufficient, unless a larger majority is stipulated by mandatory statutory law. Accordingly, certain capital measures that do not mandatorily require a majority of at least three quarters of the share capital represented, such as capital increases from the Company's own funds, may be adopted by a simple majority.

In addition, the general shareholders' meeting may create authorized capital by a resolution requiring a simple majority of the votes cast, as well as a majority of at least three quarters of the share capital represented at the time the resolution is adopted. The authorized capital gives the Executive Board authority to issue Shares up to a certain amount within a period of not more than five years after registration of the authorization with the commercial register with the approval of the Supervisory Board. The total nominal amount of the authorized capital may not exceed 50% of the share capital in existence at the time the authorization is registered with the commercial register. For details on the Company's authorized capital see *15.3. "— Authorized Capital"*.

Furthermore, the general shareholders' meeting may resolve to create conditional capital with a simple majority of the votes cast, as well as a majority of at least three quarters of the share capital represented at the time the resolution is adopted. Conditional capital can only be created in order to (i) grant exchange or subscription rights on the basis of convertible bonds (or similar instruments, including, in particular, participation rights), (ii) prepare for a business combination with one or more other companies or (iii) grant subscription rights to employees and members of the management of the Group. In case conditional capital is created for the purpose of granting subscription rights to employees and members of the management, its nominal amount may not exceed 10% of the share capital in existence at the time the resolution is adopted, in all other cases, the total nominal amount may not exceed 50%, provided, however, in both cases that it does not exceed 50% in the aggregate. For details on the Company's conditional capital see *15.4. "— Conditional Capital"*.

The general shareholders' meeting may also resolve to reduce the share capital of the Company. Such resolution requires a simple majority of the votes cast, as well as a majority of at least three quarters of the share capital represented at the time the resolution is adopted. A reduction of the share capital is also possible upon cancellation of treasury shares if the authorization granted to the

Executive Board by the general shareholders' meeting to acquire treasury shares explicitly allows for such cancellation.

15.10. General Provisions on Subscription Rights

According to the German Stock Corporation Act (*Aktiengesetz*), each shareholder is generally entitled to subscription rights to new shares to be issued in a capital increase (as well as convertible bonds, warrant bonds, profit participation rights and participating bonds). Subscription rights are freely transferable and may be traded on German stock exchanges for a prescribed period before the deadline for subscription expires.

The general shareholders' meeting may exclude subscription rights in whole or in part when resolving upon a capital increase, and may authorize the Executive Board to exclude subscription rights in case of authorized capital. All such resolutions by the general shareholders' meeting require a simple majority of the votes cast, as well as a majority of at least three quarters of the share capital represented at the time the resolution is adopted. In addition, such exclusion requires a report by the Executive Board setting forth the reasons why the Company's interest in excluding the subscription rights outweighs the shareholders' interest in retaining their subscription rights. Under the German Stock Corporation Act (*Aktiengesetz*), the exclusion of subscription rights with respect to the issuance of new shares is deemed permissible, in particular, if the Company increases its share capital against cash payment, with the amount of the capital increase not exceeding 10% of the existing share capital and the issue price of the new shares not being materially lower than the stock exchange price of the Company's then existing shares.

15.11. Squeeze-Out of Minority Shareholders

According to Sections 327a *et seqq.* German Stock Corporation Act (*Aktiengesetz*), which govern the so-called "squeeze-out under stock corporation law" of minority shareholders, the general shareholders' meeting of a stock corporation may resolve, at the request of a shareholder holding at least 95% of the share capital (principal shareholder), that the shares of the minority shareholders be transferred to the principal shareholder against payment of an adequate cash compensation. The amount of cash compensation to be granted to the minority shareholders has to take into account the situation of the company at the time of the resolution of the general shareholders' meeting. The true value of the company determines the amount of cash compensation, which is generally calculated using the capitalized earnings method (*Ertragswertmethode*). The minority shareholders are entitled to initiate valuation proceedings (*Spruchverfahren*), in the course of which the adequateness (*Angemessenheit*) of the cash compensation is reviewed.

If the majority shareholder of the stock corporation is itself a stock corporation, a partnership limited by shares (*Kommanditgesellschaft auf Aktien*), or a European company (*Societas Europaea*), in each case having its registered office in Germany, a squeeze-out in accordance with Sections 327a *et seqq*. German Stock Corporation Act (*Aktiengesetz*) may be effectuated, under certain circumstances and according to the German Transformation Act (*Umwandlungsgesetz*) providing for this so-called "squeeze-out under transformation law", in order to facilitate an upstream merger of the stock corporation (*Aktiengesellschaft*) into the majority shareholder. Pursuant to Section 62 of the German Transformation Act (*Umwandlungsgesetz*), the majority shareholder holding at least 90% of the share capital is able to request the shareholders' meeting to approve the squeeze-out within three months of the conclusion of the merger agreement. The procedure for the squeeze-out is essentially identical to the squeeze-out under stock corporation law described above, including the minority shareholders' right to have the fairness (*Angemessenheit*) of the cash compensation reviewed.

In addition, Sections 39a and 39b German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*) provide for a so-called "squeeze-out under takeover law". An offeror holding at least 95% of the voting share capital of a target company (as defined in the German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*)), after a takeover or mandatory public takeover offer, may, within three months after the expiry of the deadline for acceptance of its offer, request the transfer of the remaining voting shares to it by court order against payment of an adequate compensation. No resolution of the general shareholders' meeting is required. If the offeror holds shares representing 95% of the target company's share capital, the remaining non-voting preference shares shall also be transferred to the offeror upon his request. The compensation granted as part of the takeover or mandatory public takeover offer is deemed to be adequate if the offeror has acquired, on the basis of the offering, shares representing at least 90% of the share capital affected by the offering. The nature of the compensation must be the same as the consideration paid under the takeover bid or mandatory offer; a cash alternative must be offered in any event.

Furthermore, according to Section 39c German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*), the shareholders of a target company who have not accepted the offer may accept it within further three months after the acceptance period of the takeover or mandatory public takeover offer has expired ("sell-out") if the offeror has the right to file an application for the transfer of the outstanding shares in accordance with Section 39a German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*).

The provisions for a squeeze-out under stock corporation law cease to apply once an offeror has petitioned for a squeeze-out under takeover law, and only apply again when these proceedings have been completed.

In addition to the legal provisions on the exclusion of minority shareholders, in Sections 319 *et seqq.*, the German Stock Corporation Act (*Aktiengesetz*) provides for what is called the integration of stock corporations (*Eingliederung*). According to these provisions, the general shareholders' meeting of a stock corporation may resolve the integration of a company if 95% of the shares of the company to be integrated are held by the future principal company. The former shareholders of the integrated company are entitled to an adequate compensation that must generally be granted in the form of shares of the principal company. The amount of compensation is to be determined by the so-called merger value ratio (*Verschmelzungswertrelation*) between the companies, *i.e.*, the exchange ratio, which would have to be considered adequate in the event of a merger of the two companies. If the principal company is a controlled company (*i.e.*, a legally separate company over which another company is able to exert, directly or indirectly, a controlling influence), the former shareholders may also demand an adequate compensation in cash instead of a compensation in the form of shares.

15.12. Mandatory Takeover Bids

Pursuant to the German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*), every person whose share of voting rights directly or indirectly reaches or exceeds 30% of the voting rights of the Company must publish this fact, including the percentage of its voting rights, without undue delay, but not later than within seven calendar days by publication on the internet and through electronic media for disseminating financial information. Subsequently, such person must submit a mandatory public takeover offer to all shareholders of the Company, unless an exemption from this obligation has been granted by BaFin. The German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*) contains provisions relating to the attribution and aggregation of voting rights in order to ensure that the Shares are attributed to the person actually controlling the voting rights attached thereto. If a person fails to give

notice of reaching or exceeding the 30% threshold or fails to submit a mandatory public takeover offer, such person's shareholder rights (including voting rights and, in certain cases, the right to collect dividends and liquidation proceeds) are suspended for the duration of non-compliance. In addition, a fine may be imposed in connection with such non-compliance.

15.13. Disclosure Requirements for Voting Rights

As the Shares are admitted to trading on the regulated market segment of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*), the provisions of the German Securities Trading Act (*Wertpapierhandelsgesetz*) apply.

Section 33 para. 1 German Securities Trading Act (*Wertpapierhandelsgesetz)* requires that anyone who acquires, sells or whose shareholding in any other way reaches, exceeds or falls below 3%, 5%, 10%, 15%, 20%, 25%, 30%, 50% or 75% of the voting rights in an issuer whose home country is Germany and whose shares are admitted to trading on an organized market must without undue delay, and no later than within four trading days, notify the issuer and BaFin at the same time. The notice period commences as soon as the person obliged to notify (*Meldepflichtiger*) knows, or, under the circumstances of the case should know, that his or her voting rights reach, exceed or fall below the abovementioned thresholds. The German Securities Trading Act (*Wertpapierhandelsgesetz*) stipulates a conclusive presumption that the person or entity obliged to notify has knowledge at the latest two trading days after reaching, exceeding or falling below the threshold. Moreover, a person or entity is deemed to already hold shares as of the point in time such person or entity has an unconditional and due claim of transfer related to such shares pursuant to Section 33 para. 3 German Securities Trading Act (*Wertpapierhandelsgesetz*). Only in case that the voting rights reach, exceed or fall below the thresholds as a result of an event affecting the total number of voting rights, the notice period might then commence at a later stage, *i.e.*, at the time the person obliged to notify knows of reaching such threshold or at the latest at the time of publication of the notification of the total number of voting rights by the issuer. In such cases, the notification requirement is triggered by the establishment of ownership or an obligation to transfer such ownership which is unconditional and due without delay.

For purposes of the notification requirements, Section 34 German Securities Trading Act (*Wertpapierhandelsgesetz*) contains various rules of attribution (*Zurechnung*) of voting rights of certain persons associated with the shareholder or acting together with the shareholder. For example, shares held by a subsidiary (as defined in Section 35 German Securities Trading Act (*Wertpapierhandelsgesetz*)) are generally attributed to the parent company; similarly, shares held by a third company for the account of another company are attributed to the latter. Shares or financial instruments held for trading by a credit institution or a securities services company are not taken into account for determining the notification obligation if it is ensured that the voting rights held by them are not exercised, and that they amount to no more than 5% of the voting rights, or do not grant the right to purchase more than 5% of the voting rights.

Furthermore, any kind of co-operation among shareholders that is intended to effect a permanent and material change in the business strategy of the Company can result in an attribution of voting rights. This means that the co-operation does not necessarily have to concern the exercise of voting rights specifically; coordination in individual cases, however, will not trigger the attribution of voting rights.

Pursuant to Section 38 German Securities Trading Act (*Wertpapierhandelsgesetz*), similar obligations to notify the Company and BaFin for reaching, exceeding or falling below the abovementioned thresholds (other than the 3% threshold) apply to direct and indirect holders of certain instruments other than shares. This applies to instruments which (i) grant upon maturity an

unconditional right to acquire already issued voting shares of the Company, or grant discretion to acquire such shares, or (ii) relate to such shares and have a comparable economic effect as the aforementioned instruments. Such instruments include, among other things, transferable securities, options, futures, swaps, forward rate agreements and contracts for difference. The number of voting rights relevant for the notification requirement will generally be calculated by reference to the full nominal amount of shares underlying the instrument except where the instrument provides exclusively for a cash settlement. Details for such calculations are laid down in the Commission Delegated Regulation (EU) 2015/761.

If any of the aforementioned reporting obligations are triggered, the required notice may only be issued via the use of a standard form as set forth in the Annex to the German Securities Trading Notification Regulation (*Wertpapierhandelsanzeigeverordnung*). The notice must be submitted in German or English via an electronic portal of the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*).

The notice must include, irrespective of the event triggering the notification: (i) the number of voting rights and the share in total voting rights, (ii) the number of financial instruments and the share in total financial instruments, (iii) the aggregate number of voting rights and financial instruments and the share in total voting rights and financial instruments, in each case held by or attributed to the notifying person or entity. In addition, the notice must include certain attribution details, such as, among other things, the first name and surname of the notifying individual or the legal name, seat and state of a notifying entity, the event triggering the notification, the date on which the threshold was reached or crossed and, if voting rights or instruments are attributed.

As a domestic issuer, the Company must publish such notices it receives from shareholders immediately, but no later than within three trading days after receiving them, via such media bundle that it can be assumed that the notice will be disseminated as fast and as simultaneously as possible in the EU and the non-EU parties to the agreement on the EEA (so-called "*Medienbündel*"). The Company must also transmit the notice to BaFin and to the German Company Register (*Unternehmensregister*) for storage.

The notification requirement under Section 33 German Securities Trading Act (*Wertpapierhandelsgesetz*) applies *mutatis mutandis* to holders of voting rights within the meaning of Section 33 German Securities Trading Act (*Wertpapierhandelsgesetz*) and instruments within the meaning of Section 38 German Securities Trading Act (*Wertpapierhandelsgesetz*) if the aggregate total of voting rights held in a single issuer to be taken into account pursuant to Section 33 and Section 38 German Securities Trading Act (*Wertpapierhandelsgesetz*) reaches, exceeds or falls below the thresholds set forth in Section 33, with the exception of the 3% threshold.

Furthermore, according to Section 43 German Securities Trading Act (*Wertpapierhandelsgesetz*), a person obliged to notify (*Meldepflichtiger*) who reaches or exceeds the threshold of 10% of the voting rights, or a higher threshold, is obligated to notify the issuer within 20 trading days regarding the objective being pursued through the acquisition of voting rights, as well as regarding the source of the funds used for the purchase. Changes in those objectives must also be notified within 20 trading days. An issuer may stipulate in its articles of association that the aforementioned disclosure requirement does not apply. However, the Company has not made use of this option.

In case the disclosure requirements are not complied with by the person obliged to notify (*Meldepflichtiger*), shareholder rights (including voting rights and, in certain cases, the right to receive dividends and liquidation proceeds) are, subject to certain exceptions, suspended for the duration of non-compliance. If the failure to comply with the disclosure requirements specifically relates to the share of voting rights and is the result of a willful or grossly negligent conduct, the

suspension period is extended by six months after the person obliged to notify (*Meldepflichtiger*) files the required notification, except the incorrect notification deviates no more than 10% from the actual voting right proportion and no notification with regard to reaching, exceeding or falling below the abovementioned thresholds. In addition, a fine may be imposed if a required notification is not at all, incorrectly or incompletely made, or not made in the appropriate manner or a timely fashion. Moreover, BaFin shall, unless certain limited circumstances apply, publish such fine and set forth, in particular, the name of the person on whom the fine is imposed.

15.14. Disclosure of Transaction of Persons Holding Management Responsibilities

Pursuant to Article 19 Market Abuse Regulation, persons discharging managerial responsibilities ("**Executives**") shall notify the Company and BaFin of every transaction conducted on their own account relating to the shares or debt instruments of the Company or to derivatives or other financial instruments linked thereto (so-called "directors' dealings"). The same applies to persons closely associated with Executives. Transactions that must be notified include, among others, pledging or lending of financial instruments, transactions undertaken by any person professionally arranging or executing transactions on behalf of an Executive or a closely associated person, including where discretion is exercised, as well as transactions made under a life insurance policy. The notification requirement applies to any subsequent transaction once a total amount of EUR 20,000.00 has been reached within a calendar year. Notification shall be made promptly and no later than three business days after the date of the transaction.

For the purposes of the Market Abuse Regulation, Executive means a person within the Company who is a member of the administrative, management or supervisory body of the Company or a senior executive who is not such member but who has regular access to inside information relating directly or indirectly to the Company and who has power to take managerial decisions affecting the future developments and business prospects of the Company. A person closely associated with an Executive means a spouse, a registered civil partner (*eingetragener Lebenspartner*), a dependent child, as well as a relative who has shared the same household as the Executive for at least one year on the date of the transaction concerned. A person closely associated also includes a legal person, trust or partnership, the managerial responsibilities of which are discharged by the Executive or by a person closely associated with him or her. Finally, the term includes a legal person, trust or partnership that is directly or indirectly controlled by an Executive or by a person closely associated with him, which is set up for the benefit of such a person, or the economic interests of which are substantially equivalent to those of the Executive or a person closely associated.

The Company shall ensure that the transaction of which it is notified is promptly made public. In any case, it shall be made public no later than three business days after the transaction in a manner which enables fast access to this information on a non-discriminatory basis in accordance with the European Securities and Markets Authority's implementing technical standards. Furthermore, according to the German Securities Trading Act (*Wertpapierhandelsgesetz*), the Company shall without undue delay transmit the information to the German Company Register (*Unternehmensregister*) and notify BaFin. Non-compliance with the notification requirements may result in a fine, and BaFin may publish the fine together with the name of the person on whom the fine is imposed.

15.15. EU Short Selling Regulation

Pursuant to Regulation (EU) No. 236/2012 (the "**EU Short Selling Regulation**") and related European and German laws regulations, including the German EU Short Selling Implementation Act

(*EU-Leerverkaufs-Ausführungsgesetz*) of November 15, 2012, the short-selling of the Shares (*i.e.*, sales of Shares that the seller does not own, with the intention of acquiring Shares at a later point in time in order to be able to deliver the Shares to the buyer) is only permitted under certain conditions. Additionally, significant net short-selling positions in the Shares must be reported to BaFin and published if they exceed a specific threshold. The reporting and publication process is detailed in the German Regulation on Net-Short Positions (*Netto-Leerverkaufspositionsverordnung*) of December 17, 2012, as amended. The net short-selling positions are calculated by offsetting the short positions of a natural person or legal entity in the Shares with its long positions in such shares. The details are regulated in the EU Short Selling Regulation and the other regulations the European Commission enacted on short-selling. In certain situations described in the EU Short Selling Regulation, BaFin may restrict short-selling and comparable transactions.

15.16. Disclosure of Inside Information

Pursuant to Article 17 Market Abuse Regulation, the Company shall inform the public as soon as possible of inside information which directly concerns the Company (so-called "ad-hoc obligations"). In such case the Company shall also, prior to informing the public, inform BaFin and the management of the trading venues and facilities (*Geschäftsführungen der Handelsplätze*) where financial instruments of the Company have been admitted to trading or been included in such trading, and, after publication, without undue delay transmit the information to the German Company Register (*Unternehmensregister*).

Inside information is any information of a precise nature, which has not been made public, relating, directly or indirectly, to one or more issuers or to one or more financial instruments, and which, if it were made public, would be likely to have a significant effect on the prices of those financial instruments or on the price of related derivative financial instruments.

The Company may, on its own responsibility, delay disclosure on inside information if (i) immediate disclosure is likely to prejudice the legitimate interests of the Company, (ii) delay of disclosure is not likely to mislead the public, and (iii) the Company is able to ensure that the inside information will remain confidential. In such case, the Company shall also inform BaFin that disclosure of the information was delayed and shall provide a written explanation of how the conditions set out in the preceding sentence were met, immediately after the information is disclosed to the public. Where disclosure of inside information has been delayed and the confidentiality of that inside information is no longer ensured, the Company shall disclose such inside information to the public as soon as possible.

15.17. Other Public Company Disclosure Obligations

The legal disclosure requirements for German stock corporations listed on a public exchange include, among other things, the disclosure of an audited report of the remuneration paid to members of the Executive Board and the Supervisory Board (*Vergütungsbericht*) and the disclosure of transactions with related parties, which requirements were added to the German Stock Corporation Act (*Aktiengesetz*) with the Act on the Implementation of the Shareholder Rights Directive II (*ARUG II*) based on the Directive (EU) 2017/828 (Shareholder Rights Directive II). Furthermore, the Company is subject to the disclosure requirements under the German Securities Trading Act (*Wertpapierhandelsgesetz*) and under the Market Abuse Regulation, including, among other things, periodic financial reporting (disclosure of annual and half-year financial reports), regular calls with securities and industry analysts, and other required disclosures according to the German Securities Trading Act (*Wertpapierhandelsgesetz*) and the Market Abuse Regulation. The Company is also obliged under the Listing Rules of the Frankfurt Stock Exchange (*Börsenordnung für die Frankfurter*

Wertpapierbörse), as amended from time to time, to publish quarterly statements (unless the Company prepares quarterly financial reports), as the Shares are listed on the Prime Standard sub-segment of the regulated market (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*).

16. GOVERNING BODIES

16.1. Overview

The governing bodies of the Company are the Executive Board (*Vorstand*), the Supervisory Board (*Aufsichtsrat*) and the general shareholders' meeting (*Hauptversammlung*). The responsibilities and powers of these corporate bodies are determined by the German Stock Corporation Act (*Aktiengesetz*), the Articles of Association (*Satzung*) and the rules of procedure for the Executive Board (*Geschäftsordnung für den Vorstand*) and for the Supervisory Board (*Geschäftsordnung für den Aufsichtsrat*).

The Executive Board conducts the business of the Company in accordance with the applicable laws, the Articles of Association and the rules of procedure for the Executive Board, including the schedule of responsibilities (*Geschäftsverteilungsplan*). The Executive Board represents the Company when dealing with third parties.

The Executive Board must ensure that appropriate risk management and risk controlling mechanisms are established and maintained within the Company, its subsidiaries and associated companies. This is to ensure that any developments endangering the continuing existence of the Company can be identified at an early stage. The Executive Board is also required to regularly report to the Supervisory Board, at least on a quarterly basis, on the status of the Company's business, in particular on turnover and earnings, and the condition of the Company. Furthermore, the Executive Board reports to the Supervisory Board at least once a year, unless changes in circumstances or new matters necessitate an immediate report, on the intended business policy and other key issues relating to corporate planning and the future course of our business (especially on finance, investment and human resources planning), as well as on the Company's risk position and risk management. This report must include a discussion of any deviations between actual developments and objectives previously reported on, including the reasons for such deviations. In addition, the Executive Board must submit a budget for the following financial year. In the meeting of the Supervisory Board in which the annual financial statements are discussed, the Executive Board also has to report on the profitability of the Company, especially in relation to the return on equity. The Executive Board shall submit to the Supervisory Board, in due course, the various financial reports, including the annual financial statements and the management report, as well as the consolidated annual financial statements and consolidated management report of the Company, the half-yearly and quarterly consolidated financial report of the Company and the monthly reporting package, including monthly management accounts of the Company. As a general rule, the Executive Board is required to report events which could have a material effect on the Company, and transactions which could be of material importance, especially in relation to the Company's profitability or liquidity, and to do so in a timely manner. This is to ensure that the Supervisory Board is able to assess such transactions and to express its opinion thereon prior to any such action being taken. In addition, the chairperson of the Supervisory Board shall be informed of any other significant developments, in particular including circumstances concerning the business of an undertaking affiliated with the Company, which become known to the Executive Board and which may have a material impact upon the condition of the Company. Finally, any member of the Supervisory Board may request a report regarding the affairs of the Company at any time. In addition, the Executive Board and the Supervisory Board report annually in the annual report about the corporate governance of the Company and explain any deviations from the recommendations of the Governance Code.

Simultaneous membership on the Executive Board and on the Supervisory Board is not permitted under German law; however, simultaneous membership that results from a member of the Supervisory Board taking a seat on the Executive Board for a maximum period of up to one year is

permissible in exceptional cases. During this period, that person may not perform any duties for the Supervisory Board.

The Supervisory Board appoints the members of the Executive Board and is entitled to dismiss them for cause (*aus wichtigem Grund*). Under German stock corporation law, the Supervisory Board advises and oversees the Executive Board on the management of the Company, but is not itself authorized to manage the Company. The Articles of Association or the Supervisory Board must, however, require that the Executive Board obtain the consent of the Supervisory Board before implementing certain transactions.

According to the Articles of Association, the Supervisory Board shall determine that its consent shall be required for certain measures of the Executive Board. As of the date of the Prospectus, matters of the Company subject to the consent of the Supervisory Board as set forth in the rules of procedure for the Executive Board include the following:

a. The approval of the annual budget, including revenue and earnings plan, investment plan, liquidity and financial plan and the underlying partial plans, and including the budgeted balance sheet and the budgeted profit and loss statement, in consolidated form, for the Company and its subsidiaries;
b. Fundamental changes of the existing production and/or service programs, material changes to business policy or strategy and internal changes of the organization of material importance;
c. Incorporation, purchase and sale of companies, either by means of acquisition of shares or by acquisition of businesses/operations or parts thereof, the incorporation of subsidiaries and the formation, opening and closing of branches and of foreign representations;
d. The purchase, sale and encumbrance of real property owned by the Company and of similar rights or the creation of obligations to effect such transactions, if in an individual case or in the aggregate in the course of a business year an amount of EUR 500,000.00 is exceeded;
e. Conclusion, amendment or termination of agreements regarding the granting or the purchase of important industrial property rights (*gewerbliche Schutzrechte*);
f. The conclusion, amendment or termination of leasing, lease and tenancy agreements which obligate the Company to payments of more than EUR 500,000.00 in an individual case or which have a term of more than two years;
g. The arrangement of development projects with a total volume exceeding EUR 500,000.00 per individual case;
h. The entering into, granting, extension or prolongation of credits and credit lines, as the case may be, the issuance of bonds and the assumption of guarantees, joint liabilities or similar transactions, if and to the extent in an individual case or in the aggregate an amount of EUR 500,000.00 is exceeded in the course of a business year and unless it is a transaction between the Company and its subsidiaries;
i. Capital expenditures with a total volume of more than EUR 500,000.00;
j. Forward transactions regarding foreign currencies, securities and goods and rights traded on a stock exchange, if and to the extent they are not determined to cover/hedge firmly concluded, Company-specific orders or the financing of subsidiaries;
k. The filing of complaints or the taking of actions in court regarding court proceedings with an estimated dispute value of more than EUR 500,000.00 in each individual case;
l. The conclusion, amendment and termination of agreements with shareholders or with members of the Executive Board or the Supervisory Board, their family members within the meaning of Section 15 German Tax Code (*Abgabenordnung*), partners and close relatives, unless the Company is already represented by the Supervisory Board, and the taking on of sideline activities, in particular supervisory board mandates outside the Company, by Executive Board members;
m. Pension commitments of any manner whatsoever;

n. The conclusion, amendment or termination of agreements with employees or employee-type persons (such as freelance workers), if the annual gross remunerations and benefits exceed or would exceed EUR 150,000.00, and the increase of the salary of an employee already employed including bonus payments by more than EUR 25,000.00 per annum;
o. The granting of a general commercial power of attorney (*Prokura*) and of a general power of attorney (*Generalvollmacht*) to represent the Company;
p. The issuance of new shares of the Company (also indirectly via convertible instruments), the redemption of issued shares, as well as the issuance or repayment of corporate bonds and/or similar debt instruments;
q. The conclusion and termination of intercompany agreements pursuant to Sections 291, 292 German Stock Corporation Act (*Aktiengesetz*); and
r. All other transactions and measures which materially change the business, financial condition or results of operations of the Company or of its material subsidiaries, or which for other reasons are of fundamental importance for the Company.

All transactions referred to above under b. through r. require the consent of the Supervisory Board only if they have not been approved beforehand by the Supervisory Board's consent to the annual budget under a. above. The Supervisory Board may define further measures and transactions that shall be subject to its consent. It can revocably declare in advance its consent to a defined series or certain types of transactions.

Each member of the Executive Board shall forthwith disclose to the Supervisory Board any conflict of interest and shall inform the other members of the Executive Board accordingly. Any business between the Company and members of the Executive Board or persons or entities affiliated with them must meet arm's length standards.

The members of the Executive Board may only engage in side-line activities, including memberships in supervisory or advisory boards or comparable corporate bodies outside the Epigenomics Group, with prior written approval of the Supervisory Board.

Members of the Executive Board and Supervisory Board owe a duty of care and a duty of loyalty to the Company. Board members must consider the various interests of the Company, including those of its shareholders, employees and creditors. The Executive Board must also take into consideration shareholders' rights to equal treatment and equal access to information. Should members of the Executive Board or the Supervisory Board breach these duties, they will be jointly and severally liable to the Company for damages. Members of the Executive Board and the Supervisory Board are covered by directors' and officers' liability insurance for their activities as members of management up to a certain amount. The Company bears the cost of these insurance policies. However, it should be noted that applicable German law requires that each member of the Executive Board remains personally responsible in the case of any finding of personal liability of such member for 10% of the amount of the individual damage, up to an amount that equals up to 150% of such member's total annual fixed compensation from the Company.

Under German law, a shareholder generally cannot take direct legal action against a member of the Executive Board or the Supervisory Board if the shareholder believes that such member or members have violated their duties towards the Company and this has caused damage to the Company. Claims for damages against members of the Executive Board or the Supervisory Board may, as a rule, only be asserted by the Company itself, in which case the Company is represented by the Executive Board when claims are made against members of the Supervisory Board and by the Supervisory Board when claims are made against members of the Executive Board. According to case law of the German Federal Court of Justice (*Bundesgerichtshof*), the Supervisory Board is obligated to assert claims for damages against the Executive Board that are likely to be successful,

unless important Company interests conflict with such an assertion of claims and such interests outweigh, or are at least of equal importance to, the grounds in favor of asserting the claims.

In the event that the relevant body with powers to represent the Company decides not to pursue such claims, then such claims for damages must nevertheless be asserted against members of the Executive Board or the Supervisory Board if the general shareholders' meeting passes a resolution to this effect by a simple majority vote. Such general shareholders' meeting may appoint a special representative (*besonderer Vertreter*) to assert such claims. Shareholders whose aggregate holdings amount to at least 10% or EUR 1,000,000.00 of the Company's share capital may also apply to the competent court to appoint a special representative to assert claims for damages. In the event of such an appointment, the special representative becomes solely responsible for asserting the claims of the Company for damages in lieu of the otherwise competent governing body. In addition, if there are facts supporting the claim that the Company has been damaged by fraud or gross breaches of duty, shareholders whose aggregate holdings amount to at least 1% or EUR 100,000.00 of the Company's share capital have the option, under certain circumstances, of being granted permission by the competent court to file a lawsuit in their own name, but on account of the Company for damages to the Company against members of the governing bodies. Such a lawsuit will be dismissed if the Company itself files a lawsuit for damages.

The Company may only waive claims for compensation against members of the Executive Board or the Supervisory Board, or settle such claims, three years after such claim has arisen but only (a) if the shareholders resolve to do so in a shareholders' meeting by resolution with simple majority of the votes cast and (b) where a majority of the shareholders, together holding shares which represent at least 10% of the share capital, do not object to this in the minutes of the meeting.

Under Section 142 German Stock Corporation Act (*Aktiengesetz*), the general shareholders' meeting may appoint, by a simple majority resolution, a special auditor (*Sonderprüfer*) to review matters relating to the formation or the management of the Company, in particular measures relating to the raising and reduction of capital. If the general shareholders' meeting of the company rejects a motion to appoint a special auditor, the competent court must appoint a special auditor at the request of shareholders whose aggregate holdings amount to at least 1% or EUR 100,000.00 of the Company's share capital in case the facts justify the suspicion that irregularities or gross violations of statutory law or of the Articles of Association have been committed. If the general shareholders' meeting does appoint a special auditor, the court, however, must appoint a different special auditor at the request of shareholders whose aggregate shareholding amounts to at least 1% or EUR 100,000.00 of the Company's share capital and this is deemed necessary for reasons given in the person of the existing special auditor.

In accordance with Section 127a German Stock Corporation Act (*Aktiengesetz*), shareholders and shareholder associations can use the shareholder forum (*Aktionärsforum*) of the German Federal Gazette (*Bundesanzeiger*) to, among other things, call upon other shareholders to jointly, or through third-party representation, request a special audit, appoint a special representative, demand that a general shareholders' meeting of the Company is convened or exercise their voting rights in a general shareholders' meeting of the Company.

Under German law, it is not permitted for shareholders or any other individuals to use their influence to cause members of the Executive Board or the Supervisory Board, authorized representatives (*Prokuristen*) or other persons holding a commercial power of attorney to act in a way harmful to the Company. Any shareholder with a controlling influence may not use such influence to cause the Company to act against its own interests, unless there is a domination agreement (*Beherrschungsvertrag*) between such shareholder and the Company or any damages resulting for the Company are compensated. Any person who uses his or her influence to cause a member of

the Executive Board or the Supervisory Board, authorized representative or persons holding a commercial power of attorney to act in a manner harmful to the Company or its shareholders is required to compensate the Company and its shareholders for any resulting damage. In addition, members of the Executive Board and the Supervisory Board are jointly and severally liable for any breaches of their duties.

With resolution dated February 6, 2017, the Supervisory Board determined a share of one third of female members for the Supervisory Board to be reached until December 31, 2021. Currently, the Supervisory Board has one female member. This corresponds to a proportion of women of one quarter. The target for female participation in the Executive Board was set at 0% until December 31, 2021. As the Executive Board consists of two members and as it is currently not intended to enlarge the Executive Board, an increase in the share of female members is not expected within the next years.

In August 2021, the law to supplement and amend the regulations for the equal participation of women in management positions in the private and public sectors (*Gesetz zur Ergänzung und Änderung der Regelungen für die gleichberechtigte Teilhabe von Frauen an Führungspositionen in der Privatwirtschaft und im öffentlichen Dienst*) went into effect. Among other things, in the future, the law will require from us that the target for female participation in the respective body correspond to a specific number of female members, as well as more extensive disclosure in case the target participation in the Supervisory Board, the Executive Board or the two levels below the Executive Board is set at 0%.

16.2. Executive Board

16.2.1. General

Pursuant to Section 7 para. 2 of the Articles of Association, the Supervisory Board determines in accordance with the German Stock Corporation Act (*Aktiengesetz*) the number of members of the Executive Board. The Supervisory Board may appoint one Executive Board member as chairperson and one or more members as deputy chairpersons. Currently, the Executive Board consists of two members. On June 30, 2016, the Supervisory Board appointed Gregory Hamilton as Chief Executive Officer ("**CEO**") with effect from July 1, 2016 and Albert Weber as Executive Vice President Finance ("**EVP Finance**") with effect from January 1, 2018. Jorge Garces, Ph.D., who had served the Company as President and Chief Scientific Officer ("**CSO**") from December 1, 2017, resigned from the Executive Board effective as of January 31, 2021. He has taken up a new position at Exact Sciences Corporation, Wisconsin, United States, but continues to serve the Company as an outside advisor on scientific matters and in connection with M&A activities.

The Supervisory Board appoints the members of the Executive Board for a maximum term of five years. Reappointments or extensions of the term of office are permissible for up to five years each. Prior to the expiration of his or her term, the Supervisory Board may revoke the appointment of an Executive Board member for cause (*wichtiger Grund*), such as for gross breach of fiduciary duties, inability of proper management or if the general shareholders' meeting passes a vote of no-confidence with respect to such member, unless the no-confidence vote was clearly unreasonable. The Supervisory Board is also responsible for entering into, amending and terminating service agreements with the Executive Board members and, in general, for representing the Company in and out of court against the Executive Board. The Supervisory Board may assign some of these duties to a committee of the Supervisory Board.

The members of the Executive Board conduct the daily business of the Company in accordance with applicable laws, the Articles of Association and the rules of procedure for the Executive Board

as adopted by the Supervisory Board. They are generally responsible for the management of the Company and for handling our daily business relations with third parties, the internal organization of our business and communications with our shareholders. In addition, they have primary responsibility for (i) the preparation of our annual financial statements, (ii) the proposal for the Supervisory Board's recommendation to our shareholders' meeting on how our profits (if any) should be allocated, and (iii) regular reporting to the Supervisory Board on our current operating and financial performance, our budgeting and planning processes and our performance under them, and on future business planning.

Notwithstanding the collective responsibility for the management of the Company overall, the rules of procedure for the Executive Board provide that the members of the Executive Board will adopt, by a majority resolution of the Executive Board and with the approval of the Supervisory Board, a schedule of responsibilities (*Geschäftsverteilungsplan*) that assigns specific competencies and business divisions to each member of the Executive Board.

Each member of the Executive Board operates the business division allocated to him or her by the schedule of responsibilities on its own responsibility, but in agreement with the whole Executive Board. Regardless of the division of business competencies, each member of the Executive Board remains responsible for the management of the Company as a whole. The rules of procedure for the Executive Board also contain rules about the composition, duties, overall responsibilities and responsibility for the divisions, as well as the internal arrangements of the Executive Board.

A member of the Executive Board may not deal with or vote on matters relating to proposals, arrangements or contractual agreements between himself or herself and the Company and may be liable to the Company if he or she has a material interest in any contractual agreement between the Company and a third party which is not disclosed to and approved by the Supervisory Board.

The Executive Board makes decisions by a simple majority of the votes cast. A proposal will be regarded as rejected in case of an equality of votes. If the Executive Board has more than two members, the chairperson of the Executive Board shall have the deciding vote in the event of a tie.

Executive Board members are subject to extensive non-competition obligations for the duration of their work for the Company. They are required to disclose any conflict of interest to the Supervisory Board without delay and are not allowed to either engage in any trade or enter into any transaction in our line of business on their own behalf or on behalf of others without the prior consent of the Supervisory Board. In addition, a member of the Executive Board may not become a (i) member of an executive board, (ii) member of the board of directors (*Geschäftsführer*), or (iii) general partner (*persönlich haftender Gesellschafter*) of another commercial enterprise without the prior consent of the Supervisory Board. The members of the Executive Board may not directly or indirectly invest in companies competing with the Company or in companies with whom the Company maintains a business relationship without the prior written consent of the Supervisory Board, unless, in the case of Mr. Hamilton, it is merely a financial participation, *i.e.*, a participation in a listed company which does not exceed 5% of the share capital and does not open influencing opportunities

Pursuant to the Articles of Association, the Company is represented by one member of the Executive Board alone in case the Executive Board consists of one member only and in all other cases jointly by two members of the Executive Board or by one member of the Executive Board acting jointly with a holder of a general commercial power of attorney (*Prokurist*). The Supervisory Board may also grant each member of the Executive Board sole power of representation. The Supervisory Board may release all or individual members of the Executive Board from the prohibition of multiple representation in accordance with Section 181 German Civil Code (*Bürgerliches Gesetzbuch*).

Due to COVID-19, since 2020 and up to the date of the Prospectus, Executive Board meetings have largely taken place by means of telecommunication or video conferencing systems.

16.2.2. Current Members of the Executive Board

The following table lists the members of the Executive Board as of the date of the Prospectus, their age, the date on which they were first appointed, their term of appointment and their internal responsibilities:

Name	Age	Position	Date of first appointment	End of term of office
Gregory Hamilton	50	Chief Executive Officer (CEO)	July 1, 2016	December 31, 2022
Albert Weber	57	Executive Vice President (EVP Finance)	January 1, 2018	December 31, 2022

The expiration date of the service agreement of each member of the Executive Board corresponds with his respective term in office.

The following is a brief summary of the business experience of the Executive Board members.

Gregory Hamilton (51). CEO. Mr. Hamilton has been our CEO since July 1, 2016. He received his MBA from the University of Chicago and his Bachelor of Science in Finance from Purdue University. He has been responsible for multiple FDA-cleared products including a Human Papilloma Virus ("**HPV**") High Risk Screening assay and the first ever cleared HPV genotyping assay. Prior to joining Epigenomics, Mr. Hamilton was Chief Executive Officer and Director of AltheaDx Inc., Chief Operating Officer and Chief Financial Officer of Enigma Diagnostics Inc., Vice President of Operations and Finance at Third Wave Technologies Inc. and Vice President of Operations at Hologic Inc.

The following table shows the positions Mr. Hamilton has held as a member of a management, administrative or supervisory body in companies or as a partner in partnerships outside the Group in the last five years, as well as positions he currently holds in companies within the Group:

Positions held in companies and partnerships outside the Epigenomics Group in the last five years (held previously, unless indicated otherwise)	Positions currently held in companies within the Epigenomics Group
• AltheaDX (Chief Executive Officer, Director)	• Chairman of the Executive Board • Member of the board of directors of Epigenomics Inc.

Albert Weber (58). EVP Finance. Mr. Weber was appointed to the Executive Board effective January 1, 2018. Mr. Weber has more than 25 years of corporate finance experience including the last twenty years at Epigenomics. Prior to this recent appointment Mr. Weber was the Senior Vice President of Finance, Accounting and Controlling for Epigenomics. Prior to joining the Company, Mr. Weber served as Manager Controlling of Pironet AG, a Cologne-based IT start-up and previously at EMI Group Germany as the Manager Treasury and Corporate Accounting. Mr. Weber has experience in capital raises, all corporate finance functions and IPOs. He has a degree in Business Administration from Cologne University and is certified in IFRS accounting.

The following table shows the positions Mr. Weber has held as a member of a management, administrative or supervisory body in companies or as a partner in partnerships outside the Group in the last five years, as well as the positions he currently holds in companies within the Group.

Positions held in companies and partnerships outside the Epigenomics Group in the last five years (held previously, unless indicated otherwise)	Positions currently held in companies within the Epigenomics Group
• n/a	• Member of the Executive Board • Member of the board of directors of Epigenomics Inc.

The members of the Executive Board can be contacted under the Company's address.

Until 2021, the Executive Board also included Jorge Garces, Ph.D., who had served as the Company's President and CSO since December 1, 2017. Mr. Garces resigned from the Executive Board effective as of January 31, 2021.

16.2.3. Compensation, Other Benefits, Share Ownership

The aggregate compensation paid and benefits in kind granted by us to our CEO, Gregory Hamilton, and our EVP Finance, Albert Weber, as well as our former CSO, Jorge Garces, Ph.D., including share-based compensation, for the year ended December 31, 2020 was EUR 1,560 thousand, based on the granted benefits, or EUR 1,478 thousand, based on the allocations (cash payments) made in 2020. Total remuneration of the members of the Executive Board is reviewed by the Supervisory Board annually and is compared to national and international benchmarks. Remuneration takes into account the economic and financial situation of the Company as well as size and complexity of international operations and responsibilities. The remuneration package is composed on the one hand of a fixed and a variable component. The variable amount is determined on the basis of a variety of criteria, which are set by the Supervisory Board on a yearly basis, for example the achievement of individual performance goals and/or Company performance goals.

Apart from the fixed and the variable component, a third remuneration component comprises a long-term performance-based compensation in the form of stock option rights. Such rights are granted under our stock option programs, which are described in detail below (see *16.5. "— Stock Option Programs"*).

For the stock option rights held by the members of the Executive Board as of December 31, 2020, see 16.5.2. "— Stock Option Programs — Stock Option Holdings in 2020". On March 24, 2021, the Executive Board and the Supervisory Board resolved to issue new stock options under the SOP 19-21 on April 1, 2021 resulting in additional 25,000 stock options for Gregory Hamilton and additional 17,500 stock options for Albert Weber.

The exercise prices of the stock options granted to Gregory Hamilton under the SOP 16-18, SOP 17-19 and SOP 19-21 range from EUR 15.36 to EUR 43.44. The exercise prices of the stock options granted to Albert Weber under the SOP 16-18, SOP 17-19 and SOP 19-21 range from EUR 15.36 to EUR 40.80. The exercise prices shown above reflect the adjustment made to account for the consolidation of Shares which was resolved by the general shareholders' meeting of the Company on November 27, 2020. This adjustment was made by means of resolutions by the Executive Board and the Supervisory Board on January 29, 2021 (for details, see *16.5.1. "Governing Bodies — Stock Option Programs — Terms of Stock Option Programs"*). No stock options were exercised in 2020, 2019, and 2018.

In addition to the aforementioned remuneration components, the Executive Board members are beneficiaries of a directors' and officers' insurance with excess according to the statutory minimum amount and receive full reimbursement of their business travel expenses by the Company according to its general travel policy. Gregory Hamilton (and, until his resignation, Jorge Garces, Ph.D.) participates in the 401k plan (U.S. benefits) of the Company with an annual contribution of

USD 16,500.00 and 50%-matching of the Company and receive furthermore an annual car allowance of USD 11,000.00 and various assurance contracts. The Company pays Albert Weber contributions towards the cost of his health insurance, nursing care insurance and accident insurance as a fringe benefit.

In 2020 and 2021, the Executive Board and the Supervisory Board agreed to waive part of their compensation in line with the COVID-19-related short-time work agreement for our employees in Germany. The members of the Executive Board waived their fixed remuneration in an amount of 20% for the time period between April 1, 2020 and December 31, 2021.

The total individual remuneration of Gregory Hamilton and Albert Weber, as well as our former CSO, Jorge Garces, Ph.D., for the financial year 2020 is described below. The first table shows all benefits promised or granted to the (former) Executive Board member, whereas the second table points out the actual compensations which have been effectively paid by the Company:

	Gregory Hamilton			**Albert Weber**			**Jorge Garces, Ph.D.**		
Benefits granted (in EUR)	**2020**	**2020 (min)**	**2020 (max)**	**2020**	**2020 (min)**	**2020 (max)**	**2020**	**2020 (min)**	**2020 (max)**
Fixed compensation	349,301	349,301	349,301	200,000	200,000	200,000	303,036	303,036	303,036
Fringe benefits	81,548	81,548	81,548	5,942	5,942	5,942	78,344	78,344	78,344
Total	**430,849**	**430,849**	**430,849**	**205,942**	**205,942**	**205,942**	**381,380**	**381,380**	**381,380**
One-year variable compensation	337,751	0	450,335	108,000	0	120,000	0	0	257,483
Multi-year variable compensation	37,517	–	–	26,206	–	–	31,889	–	–
*Share-based compensation (SOP 19-21)**	37,517	–	–	26,206	–	–	31,889	–	–
*Non-share-based compensation**	0	0	0	0	0	0	0	0	0
Total	**806,117**	**430,849**	**881,184**	**340,148**	**205,942**	**325,942**	**413,269**	**381,380**	**638,863**

* The value of the share-based compensation is measured by the fair value of the issued stock options at their grant dates. Stock options cannot be exercised before the end of a waiting period of four years after their issuance.

	For the Financial Year 2020		
Benefits granted (in EUR)	**Gregory Hamilton**	**Albert Weber**	**Jorge Garces, Ph.D.**
Fixed compensation	349,301	200,000	303,036
Fringe benefits	81,548	5,942	78,344
Total	**430,849**	**205,942**	**381,380**
One-year variable compensation	230,728	72,000	156,801
Multi-year variable compensation	0	0	0
*Share-based compensation (SOP 19-21)**	*0*	*0*	*0*
*Non-share-based compensation**	*0*	*0*	*0*
Total	**661,577**	**277,942**	**538,181**

* The value of the share-based compensation is measured by the fair value of the issued stock options at their grant dates. Stock options cannot be exercised before the end of a waiting period of four years after their issuance.

As of the date of the Prospectus, the shareholdings of the members of the Executive Board in the Company are as follows:

Executive Board Member	Shares Being Held
Gregory Hamilton	2,656
Albert Weber	12
Total	**2,668**

As of the date of the Prospectus, no member of the Executive Board holds any Mandatory Convertible Bonds 2021/2024.

16.2.4. Service Agreements and Other Arrangements

The service agreements of all Executive Board members have a fixed term until the end of the term of their appointment as shown under *16.2.2. "— Current Members of the Executive Board"* above. In the case that the appointment of a member of the Executive Board as member of the Executive Board is revoked for cause, the Company may terminate the service agreement of the relevant member of the Executive Board for cause. In case of a premature termination of the respective service agreement without cause, the Executive Board member is entitled to receive a severance payment in an amount that does not exceed two years' total annual compensation, but payment is limited to the value of its claims arising during the remaining time of the service agreement.

The service agreements of all Executive Board members contain post-contractual non-compete provisions with a non-compete period of one year following the termination of the applicable employment agreement. During such period, the Executive Board member is entitled to 100% of his recent fixed compensation as a non-competition payment. In connection with the resignation of our former CSO, Jorge Garces, Ph.D., his post-contractual non-compete was waived to the extent necessary to permit him to work in his specific new position at Exact Sciences Corporation, Wisconsin, United States.

In the event of a change of control, as defined in the German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*), Mr. Hamilton is entitled to receive a value enhancement bonus in cash which is equal to the lower of (i) 3.0% of the amount by which the aggregate purchase price or any other compensation paid to the shareholders of the Company in connection with the change of control exceeds the amount of the number of shares issued by the Company multiplied with the closing price of the Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) on June 29, 2016 and (ii) USD 7,000,000.00.

In the event of a change of control, as defined by the German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*), Mr. Weber is entitled to receive a value enhancement bonus in cash which is equal to the lower of (i) 3.0% of the amount by which the aggregate purchase price or any other compensation paid to the shareholders of the Company in connection with the change of control exceeds the amount of the number of shares issued by the Company multiplied with the closing price of the Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) on January 1, 2018 and (ii) EUR 3,000,000.00.

Further, within one year after a change of control occurred, all members of the Executive Board are entitled to terminate their service contracts and to resign from office within a period of six months. In the event of such a termination of service contracts, the fixed compensation and bonus, if any, will be paid to the members of the Executive Board for the remaining term of the service contract.

Additionally, Gregory Hamilton is entitled to receive a M&A bonus in cash of between USD 400,000.00 and USD 3,000,000.00 (depending on the total purchase price) in the event of (i)

a third party acquiring control of the Company pursuant to Sections 29 para. 2, 30 German Securities Acquisition and Takeover Act (*Wertpapierübernahmegesetz*) (subject to certain conditions) or (ii) the acquisition by way of an asset deal of all or substantially all of the assets of the Company or of such assets of the Company representing more than 50% of all assets of the Company measured by market value. Such transaction has to be completed during the term of his service contract but no later than January 1, 2022. If such transaction triggers a value enhancement bonus (as described above), the M&A bonus shall be credited towards the value enhancement bonus. The M&A bonus shall not be payable if, prior to the consummation of any such transaction, Medicare coverage for Epi proColon is achieved.

16.3. Supervisory Board

16.3.1. General

In accordance with the Articles of Association, as well as Sections 95 *et seq.* German Stock Corporation Act (*Aktiengesetz*), the Supervisory Board consists of four members. The number of Supervisory Board seats was decreased from six to four by resolution of the ordinary general shareholders' meeting on June 16, 2021.

A person may not become a member of the Supervisory Board who (i) is already a member of the supervisory board in ten commercial enterprises which are required by law to form a supervisory board, (ii) is the legal representative of a controlled enterprise of the Company, (iii) is the legal representative of another company whose supervisory board includes a member of the Executive Board, or (iv) was a member of the Executive Board during the past two years, unless he or she was elected upon nomination by shareholders holding more than 25% of the voting rights in the Company. The Supervisory Board should not comprise more than two former members of the Executive Board.

Members of the Supervisory Board are appointed at the general shareholders' meeting with a simple majority of the votes cast as set out by Section 101 German Stock Corporation Act (*Aktiengesetz*). At the same time as appointing the members of the Supervisory Board, the general shareholders' meeting of the Company may appoint substitute members for each Supervisory Board member, who, in accordance with specific determinations by the general shareholders' meeting of the Company, may become members of the Supervisory Board if elected Supervisory Board members leave office before the end of their term and no successor has been appointed. The term of the substitute member expires at the end of the general shareholders' meeting of the Company during which a successor for the departing Supervisory Board member is appointed, but no later than the expiration of the departing Supervisory Board member's term. The election of a successor for a member leaving office before the end of his or her term is valid for the remainder of the term of office of the departing member.

In general, the term of office of each Supervisory Board member, as well as the term of each substitute member, expires at the end of the ordinary general shareholders' meeting approving the activities of the Supervisory Board for the fourth financial year following the commencement of the member's term of office, not including the financial year in which the term commences. Reelection, including repeated reelection, is permissible. The general shareholders' meeting may specify a term of office for individual or all members of the Supervisory Board which is shorter than the standard term of office and, subject to statutory limits, different start and end dates of their term. Pursuant to a resolution of the Supervisory Board, subject to certain exceptions, Supervisory Board members should belong to the Supervisory Board for a maximum term of twelve years in total, and the Supervisory Board will only submit proposals for the election of Supervisory Board members to the general shareholders' meeting that comply with this rule.

Supervisory Board members elected by the general shareholders' meeting of the Company may be removed by a resolution of the general shareholders' meeting of the Company which requires, in principle, a majority of 3/4 of the votes cast. In deviation from that standard rule, the Articles of Association provide that a resolution of the general shareholders' meeting on the removal of a Supervisory Board member shall be adopted with a simple majority of the votes cast. In addition, the Articles of Association provide that regular members and substitute members of the Supervisory Board may resign with a four-week notice period, without cause, by providing written notice to the Executive Board and informing the chairperson of the Supervisory Board.

The Supervisory Board elects a chairperson and one or several deputy chairpersons from among its members. The deputy chairperson exercises the chairperson's rights and obligations at any time the chairperson is prevented from doing so.

On June 16, 2021, the general shareholders' meeting reelected Dr. Helge Lubenow, Heino von Prondzynski, Franz Thomas Walt and Alexander Link as members of the Supervisory Board. The members of the Supervisory Board have reelected Heino von Prondzynski as chairperson and Alexander Link as deputy chairperson. The term of office of all four members of the Supervisory Board is scheduled to expire upon the end of the ordinary general shareholders' meeting in 2024.

Under mandatory statutory provisions and the Articles of Association, the Supervisory Board is authorized to establish internal rules of procedure and form committees among its members. The internal rules of procedure for the Supervisory Board are dated December 21, 2020. In addition to the functions and tasks of the Supervisory Board described above (see *16.3. "— Supervisory Board"*), the Supervisory Board is authorized to make amendments to the Articles of Association that only affect their wording.

German law for publicly traded companies provides that at least one member of the Supervisory Board has to have expertise in the fields of accounting or auditing. On the Supervisory Board, Alexander Link is considered to have such expertise. Furthermore, the members of the Supervisory Board as a whole shall have competence relevant to that sector in which the Company is operating. The Supervisory Board members fulfill this requirement.

The Supervisory Board must meet at least once per calendar quarter. A meeting of the Supervisory Board shall also be convened whenever this is requested by a member of the Supervisory Board or by the Executive Board, stating purpose and reasons for the meeting. Meetings of the Supervisory Board are convened in text form by its chairperson, or if he or she is prevented from doing so, by the deputy chairperson, observing a notice period of fourteen days. The day of dispatch of the convening notice and the day of the meeting itself are not included when calculating this period. In urgent cases, a later notification, as well as a notification made orally or by telephone is permissible.

Due to COVID-19, since 2020 and up to the date of the Prospectus, Supervisory Board meetings have largely taken place by means of telecommunication or video conferencing systems.

The Supervisory Board has a quorum if at least three of its members participate in the adoption of a resolution. Absent members may participate by having their written votes delivered through members of the Supervisory Board who are present at the meeting, or by casting their votes orally, by telephone, by telegraph, by telex or fax, by e-mail or by any other customary means of telecommunication, in particular by video-conference, either during the meeting or after a meeting within an adequate period of time to be determined by the chairperson, if no member attending the meeting in person objects. Such an objection cannot be raised if all members attending the meeting in person and the member not attending the meeting in person can see and hear each other in real-time conditions and can thus discuss the matter on which the resolution is to be passed.

Unless otherwise required by law or the Articles of Associations, resolutions of the Supervisory Board are passed by a simple majority of the votes cast. For the purposes of passing a resolution, abstentions do not count as votes cast. In the event of a tie, the chairperson has the deciding vote.

The Articles of Association provide that at the chairperson's request, resolutions may be passed without a meeting in writing, by telegraph, by telex or fax, by e-mail or any other customary means of communication, *i.e.*, in particular by video-conference, if no member objects to this procedure without undue delay. Such an objection cannot be raised if all members of the Supervisory Board can see and hear each other in real-time conditions and can thus discuss the matter on which the resolution is to be passed.

16.3.2. Current Members of the Supervisory Board

The following table sets forth the current members of the Supervisory Board. Heino von Prondzynski is the current chairperson of the Supervisory Board.

Name	Age	Position	Date of appointment	End of term of office
Heino von Prondzynski[1]	71	Chairperson	May 2, 2012[1]	2024
Alexander Link	50	Deputy chairperson	June 12, 2020	2024
Dr. Helge Lubenow	53	Member	May 25, 2016	2024
Franz Thomas Walt	62	Member	May 15, 2019	2024

[1] Heino von Prondzynski was a Supervisory Board member from May 2007 to March 2010 and again since May 2012.

At the end the respective current term, certain members of the Supervisory Board will exceed twelve years tenure in office, which the German Corporate Governance Code (*Deutscher Corporate Governance Kodex*) (as amended on December 16, 2019 by the Government Commission German Corporate Governance Code and published in the German Federal Gazette (*Bundesanzeiger*) on March 20, 2020, the "**Governance Code**") considers an indication that such members may not be independent within the meaning of the Governance Code. This does not preclude such members of the Supervisory Board from re-election. Nevertheless, it may well be that one or all such members choose not run for re-election at the ordinary general shareholders' meeting of the Company. In this case, it could be proposed to the ordinary general shareholders' meeting to reduce the number of Supervisory Board seats set out in the Articles of Associations.

The following table shows the names of the members of the Supervisory Board, as well as – where applicable – their further positions as members of a management, administrative or supervisory board in companies or as partners in partnerships. Positions held in companies or partnerships outside the Epigenomics Group in the last five years but no longer current, are also reflected in the following table:

Name	Further positions as a member of a management, administrative or supervisory body in companies or as a partner in partnerships in the last five years
Heino von Prondzynski	• HTL-Strefa S.A. (until 2017) • Koninklijke Philips Electronics N.V. (until 2018) • Quotient Ltd. (ongoing) • The Binding Site Group, UK (ongoing)
Alexander Link	• Deutsche Balaton Aktiengesellschaft (ongoing) • CornerstoneCapital Beteiligungen GmbH (ongoing) • HW Verwaltungs AG (ongoing) • PWI-Pure System AG (ongoing) • Tabalon Mobile Technologies AG (ongoing) • Nordic SSW 1000 Verwaltungs AG (ongoing) • 2invest AG (formerly 4basebio AG) (ongoing) • SPK Süddeutsche Privatkapital AG (ongoing) • DIO Deutsche Immobilien Opportunitäten AG (ongoing)
Dr. Helge Lubenow	• evorion biotechnologies GmbH (ongoing) • Indical TopCo AB (ongoing) • ProteoMediX AG (ongoing) • tesa Labtec GmbH (ongoing)
Franz Thomas Walt	• Quotient Ltd. (until 2021) • Walt Consulting (until 2019) • Siemens Healthcare Diagnostics Products GmbH (until 2017)

We have a Supervisory Board with strong experience in our industry. The following is a brief summary of the business experience of the Supervisory Board members. The business address for the Supervisory Board members is the Company's address.

Heino von Prondzynski (71) Chairperson. Mr. von Prondzynski studied mathematics, geography and history at the Westfälische Wilhelms University, Münster, Germany. He previously worked, among others, at Bayer AG in several positions (1985 to 1995), served as CEO of Chiron Behring GmbH (1996 to 2000), as CEO of the diagnostics division of F. Hoffmann-La Roche Ltd (2000 to 2006) and as a member of the supervisory board of Koninklijke Philips Electronics N.V. (2007 to 2019). He was also a member of the corporate executive committee of Roche. Since 2006, he has served as an independent business consultant. Mr. von Prondzynski is an expert and business leader in the field of molecular diagnostics with an extensive network of contacts in the United States, Asia and Europe. Mr. von Prondzynski is also Chairman of Quotient Ltd (Jersey) with seat in Eysins, Switzerland, and a member of the supervisory board of The Binding Site Group Ltd. (UK).

Alexander Link (50) Deputy chairperson. Mr. Link studied law at the Albert-Ludwigs-University in Freiburg and the Westfälische Wilhelms-Universität University in Münster. After his studies and working in consulting, he held various management positions within Eurohypo AG and Commerzbank AG. Mr. Link has many years of experience in the banking sector and in management consulting. In addition, he has particularly broad experience in the areas of finance/controlling, risk management and M&A. Since 2020, he has been a member of the board of directors of the listed Deutsche Balaton Aktiengesellschaft, Heidelberg. Mr. Link is an independent member (within the meaning of the Governance Code).

Dr. Helge Lubenow (53) Member. Dr. Lubenow earned her doctorate degree in Genetics from the University of Cologne and the Max Planck Institute for Plant Breeding, Cologne, Germany in 1997. Subsequently, she held several positions at Qiagen GmbH, Hilden, Germany, including senior Vice President and head of the molecular diagnostic business (2011 to 2015). During this time, Dr. Lubenow assumed positions in enterprises newly acquired by Qiagen GmbH, such as Corbett Life Science in Sydney and Brisbane (Australia) and Digene Inc. in Gaithersburg (United States) and was responsible for restructuring or integration of the respective enterprise. In February 2016, Dr. Lubenow founded AGOS Consulting (Germany). Dr. Lubenow is a member of the board of tesa

Labtec GmbH, as well as a former member of the board of directors of ProteoMediX AG (Switzerland) and Indical TopCo AB. Since January 2020, she serves as CEO of ProteoMediX AG (Switzerland).

Franz Thomas Walt (62) Member. Mr. Walt holds an MBA of City University, Bellevue, Washington (United States) and completed executive programs at Columbia University, IMD, Switzerland, London Business School and INSEAD, France. Mr. Walt spent over 33 years in leadership roles including at two of the world's largest healthcare companies, Siemens Healthineers and Roche. Between 1989 and 2011, he held various positions of increasing responsibility in pharma and diagnostics, which included CEO, Managing Director and President roles, in various geographic regions for Roche Diagnostics and member of the Roche Diagnostics Executive Committee (DiaEC). Most recently, he worked at Siemens Healthineers (2012 to 2017) as Global President of Laboratory Diagnostics. From 2018 to 2021, he served as Chief Executive Officer of NASDAQ-listed Quotient Ltd. Eysins, Switzerland.

16.3.3. Compensation, Other Benefits, Share Ownership

The remuneration structure for the Supervisory Board is based on an annual cash retainer for the membership in the Supervisory Board, as well as in committees, if any (fixed remuneration), and attendance fees (variable remuneration). The remuneration does not comprise any performance-related elements or long-term incentive components.

In 2020 and 2021, the Executive Board and the Supervisory Board agreed to waive part of their compensation in line with the COVID-19-related short-time work agreement for our employees in Germany. The members of the Supervisory Board waived their fixed remuneration in an amount of 20% for the time period between April 1, 2020 and December 31, 2021. In addition, with effect as of July 1, 2020, the members of the Supervisory Board waived half their attendance fee in case of virtual meetings.

The remuneration of the members of the Supervisory Board for the financial year 2020 was as follows:

	Fixed	Attendance Fee	Total
Supervisory Board Member		**(in EUR)**	
Heino von Prondzynski	76,500	9,000	85,500
Alexander Link[1]	11,467	3,000	14,467
Dr. Helge Lubenow	29,750	9,000	38,750
Franz Thomas Walt	29,750	9,000	38,750
Ann C. Kessler, Ph.D.[2]	34,000	9,000	43,000
Prof. Dr. Günther Reiter[2]	34,000	9,000	43,000
Total	**215,467**	**48,000**	**263,467**

[1] Supervisory Board member since June 12, 2020.

[2] Term ended in June 2021.

In addition, the members of the Supervisory Board were reimbursed for directly incurred expenses in connection with their attendance of Supervisory Board meetings totaling EUR 9,000.00 in 2020.

As of the date of the Prospectus, the shareholdings of the current members of the Supervisory Board are as follows:

Supervisory Board Member	Shares Being Held
Heino von Prondzynski[1]	166,260
Alexander Link	11,490
Dr. Helge Lubenow	2,193
Franz Thomas Walt	2,437
Total	**182,380**

[1] In order to permit an even subscription ratio, Heino von Prondzynski has waived the subscription rights regarding the Offering arising from 22,303 Shares being held by him.

As of the date of the Prospectus, no member of the Supervisory Board holds any Mandatory Convertible Bonds 2021/2024.

Members of the Supervisory Board that were not members of the Supervisory Board or had a position as chairperson or deputy chairperson for the whole financial year receive the aforementioned compensation *pro rata temporis* in the amount of the twelfth part per month or part thereof.

In addition, we have obtained directors' and officers' liability insurance, which covers liabilities and expenses, capped at a certain amount, that the Supervisory Board members may incur in connection with their conduct as directors or officers of our company.

16.3.4. Committees

Under the Articles of Association, the Supervisory Board may form committees from among its members and authorize such committees to perform specific tasks.

16.3.4.1. Audit Committee

In June 2016, the Supervisory Board established an advisory audit committee. Alexander Link, Dr. Helge Lubenow and Franz Thomas Walt are current members of the advisory audit committee. At least one member of the audit committee must have expertise knowledge in the fields of accounting or annual auditing within the meaning of Section 100 German Stock Corporation Act (*Aktiengesetz*). Alexander Link is such an "audit committee financial expert". In addition, the members of the audit committee as a whole shall have competence relevant to the sector in which the Company is operating. Alexander Link, Dr. Helge Lubenow and Franz Thomas Walt have this kind of expertise.

The Governance Code contains the recommendation that the chairperson of the audit committee shall have specific knowledge and experience in applying accounting principles and internal control procedures, shall be familiar with audits, and shall be independent. In addition, he or she shall not be the same person as the chairperson of the Supervisory Board. Alexander Link, the chairman of our audit committee, fulfills these recommendations.

Meetings of the audit committee take place prior to the approval of the annual financial statements and of the consolidated financial statements, as well as prior to the publication of the half-year financial report of the Company and, beyond that, as and when required.

Our audit committee deals with:

- accounting issues;

- the monitoring of the accounting process. Thereby the audit committee can submit recommendations and proposals to the Supervisory Board which are aimed at securing the integrity of the accounting process;
- the effectiveness of the internal control system, of the risk management system and of the internal audit system; and
- aspects of compliance.

Moreover, our audit committee also deals with the audit of the annual financial statements, such as the choice and the independence of the auditor, the non-audit services rendered by the auditor, the issuing of the audit mandate to the auditor, the determination of auditing focal points and the fee agreement. Further, the audit committee has the following tasks, among other things:

- The audit committee prepares the decisions of the Supervisory Board, to the extent required by statutory law, on the approval of non-audit services by the auditor; and
- The audit committee should issue a recommendation for the election of the auditor. The proposal of the Supervisory Board to the shareholder meeting for the election of the auditor shall be based on the recommendation of the audit committee.

Furthermore, the audit committee prepares the decisions of the Supervisory Board on the approval of the annual financial statements and of the consolidated financial statements, as well as the preparation of the corporate governance report, including the remuneration report. To this effect, the audit committee reviews the documents set forth in the foregoing sentence, as well as the management report and the consolidated management report and the proposal for the attribution of profits. The auditor shall attend the discussions of the audit committee on these issues.

16.3.4.2. Compensation Committee

We have not established a compensation committee. The Supervisory Board also performs the roles and responsibilities of a compensation committee. In this capacity, the Supervisory Board determines the compensation of each of the members of the Executive Board. The Supervisory Board has designated Heino von Prondzynski as the main expert on compensation and nomination matters.

In particular, the Supervisory Board is responsible for:

- Identifying, reviewing and approving corporate goals and objectives relevant to Executive Board compensation;
- Analyzing the possible outcomes of the variable remuneration components and how they may affect the remuneration of the members of the Executive Board;
- Evaluating Executive Board member's performance in light of such goals and objectives and determining the compensation of each Executive Board member based on such evaluation;
- Determining any long-term incentive component of the compensation of each Executive Board member in line with the remuneration policy and reviewing the Executive Board compensation and benefits policies generally;
- Periodically reviewing, in consultation with our CEO, our management succession planning; and
- Reviewing and assessing risks arising from our compensation policies and practices for our employees and whether any such risks are reasonably likely to have a material adverse effect on us.

The Supervisory Board will also exercise the authority normally vested in a nominating and governance committee.

16.4. Certain Information on the Members of the Executive Board and the Supervisory Board

During the last five years, no current member of the Executive Board or the Supervisory Board has been convicted of any fraudulent offenses. In addition, during the last five years, no current member of the Executive Board or the Supervisory has been publicly incriminated or sanctioned by statutory or regulatory authorities (including designated professional bodies), or disqualified by a court from acting as a member of the administrative, management or supervisory bodies of an issuer or from acting in the management or conduct of the affairs of any issuer.

No current member of the Executive Board or the Supervisory Board, acting in the capacity of a member of an administrative, management or supervisory body or a senior manager, has been associated with any bankruptcies and/or insolvencies, receiverships or liquidations in the last five years.

At the date of the Prospectus, no family relationships exist among the members of the Executive Board, among the members of the Supervisory Board and among the members of the Executive Board on the one hand and the members of the Supervisory Board on the other hand. In addition, except as described for the members of the Executive Board in *16.2.4. "— Executive Board — Service Agreements and Other Arrangements"*, no member of the Executive Board or the Supervisory Board has executed a contract for services with a company of the Group that provides for benefits on termination.

All members of the Executive Board, *i.e.*, Gregory Hamilton and Albert Weber, as well as all members of the Supervisory Board, *i.e.*, Heino von Prondzynski, Alexander Link, Dr. Helge Lubenow and Franz Thomas Walt directly or indirectly hold shares, convertible bonds and/or stock option rights of the Company. As a result, they have financial and economic interests, separately from their positions in the respective governing body, that may diverge from the Company's and, thus, constitute a potential conflict of interest. In other respects, no conflicts or potential conflicts exist with regard to obligations owed to the Company as of the date of the Prospectus that could result from their private interests or other obligations, except as described in *3.9. "The Offering* and the *Listing — Interest of Persons Participating in the Offering* and Listing *"* and *17. "Transactions and Relationships with Related Parties"*. See also *16.2.3. "— Executive Board — Compensation, Other Benefits, Share Ownership"* and *16.3.3. "— Supervisory Board — Compensation, Other Benefits, Share Ownership".*

16.5. Stock Option Programs

16.5.1. Terms of Stock Option Programs

As of the date of the Prospectus, we have three stock option programs in place.

On May 25, 2016, our general shareholders' meeting resolved to authorize the Executive Board and the Supervisory Board until April 30, 2018 to issue up to 1,000,000 stock options, each entitling the beneficiary to subscribe for one Share, subject to certain adjustments, to be issued from the Conditional Capital XI (the "**SOP 16-18**").

On May 30, 2017, our general shareholders' meeting resolved to authorize the Executive Board and the Supervisory Board until May 31, 2019 to issue up to 1,000,000 stock options, each entitling the

beneficiary to subscribe for one Share, subject to certain adjustments, to be issued from the Conditional Capital XII (the "**SOP 17-19**").

On May 15, 2019, our general shareholders' meeting resolved to authorize the Executive Board and the Supervisory Board until May 31, 2021 to issue up to 1,000,000 stock options, each entitling the beneficiary to subscribe for one Share, subject to certain adjustments, to be issued from the Conditional Capital XIII (the "**SOP 19-21**").

Eligible beneficiaries of each stock option program are Executive Board members and employees (and the executives and employees of our subsidiary) who have a service or employment agreement.

Each program contemplates a vesting of the options in four equal annual tranches after the issuance of the options. The Supervisory Board or the Executive Board, with the consent of the Supervisory Board, may declare certain options vested before such time. Vested options can be exercised from the fourth anniversary of the issue date (waiting period). The options expire seven years after their issue date. Options that are not exercised during their term will expire without compensation.

The options may generally only be exercised by their holders upon payment to us of the exercise price, which, subject to certain adjustments, equals 110% of the non-volume weighted average XETRA closing rates of our Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) on the ten trading days preceding the issue date of the tranche (original price).

Further, options may be exercised only if the XETRA closing price of our Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) exceeds the original price by at least 10% on at least one trading day in the period between the issue date of the tranche and the expiration of the waiting period. If this target has not been reached upon expiration of the waiting period, the options will expire without compensation.

In case of certain capital measures, including capital reductions, the Executive Board or the Supervisory Board may adjust the number of existing stock options in the same proportion as the number of shares of the Company before such capital measure to the number of shares of the Company after such capital measure. In these cases, the exercise price per share shall change in inverse proportion. Pursuant to such authorization, upon implementation of the reduction of the Company's share capital resolved by the general shareholders' meeting of November 27, 2020 (see *15.1.1. "Information on the Share Capital of Epigenomics AG and Applicable Regulations — Current Share Capital and Shares — Foundation and Capital Measures*"), on January 29, 2021, the Executive Board and the Supervisory Board reduced the number of stock options by the ratio 8:1 and inversely increased the exercise price per share.

Any unvested option will generally expire without compensation upon termination by the holder thereof of his or her service or employment contract with us or if we terminate such contract for cause. Any option that has vested but not yet been exercised will generally expire without compensation upon termination by us of the option holder's service or employment contract with us for cause.

16.5.2. Stock Option Holdings in 2020

The tables below show the changes in the stock option holdings of the members of the Executive Board, as well as our former CSO, Jorge Garces, Ph.D., and other employees under each stock option program between December 31, 2019 and December 31, 2020, including the adjustments to the respective number of options and average exercise price to reflect the capital reduction (see *16.5.1. "— Terms of Stock Option Programs"*).

16.5.2.1. Stock Options Issued Under the SOP 16-18

Option Holder	Options as of December 31, 2019	*New Issuance*	*Forfeiture*	*Exercise*	*Adjustment for Capital Reduction*	Options as of December 31, 2020[1]
Gregory Hamilton.....	227,500	*0*	*0*	*0*	*-199,064*	28,436
Albert Weber.....	30,000	*0*	*0*	*0*	*-26,250*	3,750
Jorge Garces, Ph.D.....	0	*0*	*0*	*0*	*0*	0
Others[2].....	640,250	*0*	*20,625*	*0*	*-542,182*	77,443
- of which subsidiary employees.....	*334,625*	*0*	*20,000*	*0*	*-275,299*	*39,326*
Total.....	**897,750**	***0***	***20,625***	***0***	***-767,496***	**109,629**
Average exercise price (in EUR)	**4.85**	***n/a***	***4.15***	***n/a***	***n/a***	**38.90**

[1] Adjusted to reflect the consolidation of Shares. For details, see *16.5.1. "— Terms of Stock Option Programs"*.

[2] Including certain former members of the Executive Board and certain former and current employees of the Epigenomics Group.

16.5.2.2. Stock Options Issued Under the SOP 17-19

Option Holder	Options as of December 31, 2019	*New Issuance*	*Forfeiture*	*Exercise*	*Adjustment for Capital Reduction*	Options as of December 31, 2020[1]
Gregory Hamilton.....	164,080	*0*	*0*	*0*	*-143,571*	20,509
Albert Weber.....	140,000	*0*	*0*	*0*	*-122,500*	17,500
Jorge Garces, Ph.D[2]	170,000	*0*	*0*	*0*	*-148,750*	21,250[2]
Others[3].....	501,845	*0*	*33,000*	*0*	*-410,250*	58,595
- of which subsidiary employees.....	*303,120*	*0*	*28,450*	*0*	*-240,337*	*34,333*
Total.....	**975,925**	***0***	***33,000***	***0***	***-825,071***	**117,854**
Average exercise price (in EUR)	**2.88**	***n/a***	***2.00***	***n/a***	***n/a***	**23.25**

[1] Adjusted to reflect the consolidation of Shares. For details, see *16.5.1. "— Terms of Stock Option Programs"*.

[2] In connection with the resignation of our former CSO, Jorge Garces, Ph.D., except for 7,968 stock options these stock options expired without compensation on January 31, 2021.

[3] Including certain former and current employees of the Epigenomics Group.

16.5.2.3. Stock Options Issued Under the SOP 19-21

Option Holder	Options as of December 31, 2019	*New Issuance*	*Forfeiture*	*Exercise*	*Adjustment for Capital Reduction*	Options as of December 31, 2020[1]
Gregory Hamilton.....	0	*100,000*	*0*	*0*	*-87,500*	12,500
Albert Weber.....	0	*70,000*	*0*	*0*	*-61,250*	8,750
Jorge Garces, Ph.D.[2]	0	*85,000*	*0*	*0*	*-74,375*	10,625[2]
Others[3].....	0	*286,850*	*39,400*	*0*	*-216,522*	30,928
- of which subsidiary employees.....	0	145,000	35,000	0	-96,250	13,750
**Total ..... **	**0**	***541,850***	***39,400***	***0***	***-439,647***	**62,803**
**Average exercise price (in EUR) ..... **	**n/a**	***2.50***	***2.50***	***n/a***	***n/a***	**20.00**

[1] Adjusted to reflect the consolidation of Shares. For details, see *16.5.1. "— Terms of Stock Option Programs"*.

[2] In connection with the resignation of our former CSO, Jorge Garces, Ph.D., these stock options expired without compensation on January 31, 2021.

[3] Including certain former and current employees of the Epigenomics Group.

In addition, between December 31, 2021 and the date of the Prospectus, a total of 145,750 new stock options were issued under the SOP 19-21 resulting in another 25,000 stock options for Gregory Hamilton and another 17,500 stock options for Albert Weber, as well as another 103,250 stock option rights for other current employees of the Group.

16.5.3. Discontinued Phantom Stock Program

Until December 31, 2015, we granted phantom stock rights ("**PSRs**") as an incentive program to employees and members of the Executive Board. There had been several different Phantom stock programs ("**PSPs**"). The beneficiaries included Mr. Weber. Each PSR granted its holder a conditional claim against us for a future payment in cash equal to the absolute difference between (i) the market share price of our stock at the time of the exercise of the PSR and (ii) the pre-defined exercise price of the PSR (calculated based on the average of the XETRA closing price of our Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) on the five trading days preceding the issue date of the PSRs tranche). Such payment was limited to a maximum amount of between EUR 8.00 and EUR 15.00 per PSR. The PSRs were subject to vesting and expiration without compensation. A takeover or a mandatory offer for our Shares in accordance with the German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*), entitled the holders of vested PSRs to exercise these rights in full even if the waiting period for these rights had not yet been expired. The last PSRs expired in 2020 without being exercised. For further details on the phantom stock programs, see note 42 to the consolidated balance sheet of the Audited Consolidated Financial Statements 2020 (page F-36 *et seqq*.).

16.6. General Shareholders' Meeting

Pursuant to the Articles of Association, the general shareholders' meeting of the Company takes place at the registered office of the Company or at the registered office of a German stock exchange. The invitation to a general shareholders' meeting is published in the German Federal Gazette (*Bundesanzeiger*) together with the agenda of the meeting and proposals for voting by the Executive Board and/or the Supervisory Board. The ordinary general shareholders' meeting of the Company is held within the first eight months of each financial year.

Only those shareholders who are registered in the Company's stock register and have duly submitted notifications of attendance in a timely manner prior to the meeting shall be entitled to

attend the general shareholders' meeting and to exercise their voting rights. Such notification of attendance shall be made in German or English language and must be received by the Company at the address specified for this purpose in the notice of the meeting no less than six days prior to the general shareholders' meeting. A shorter time limit to be expressed in days may be stipulated in the notice of the meeting. The day of receipt of the notification of attendance and the day of the general shareholders' meeting shall not be taken into account for the purpose of calculating this time limit. The Executive Board is authorized to determine that the shareholders may also attend the general shareholders' meeting without being present at the place where it is held and without a proxy and may exercise their rights in whole or in part by means of electronic communication (online participation) or may submit their votes, without attending the meeting, in writing or by means of electronic communication (absentee voting). Should the Executive Board use this authorization, it will specify the details of this procedure at the time of convening the general shareholders' meeting.

A general shareholders' meeting of the Company must generally be called at least 30 days prior to the date of the meeting, excluding the day the notice is sent and the day of the general shareholders' meeting of the Company itself, unless a shorter period is permitted by law (for example, pursuant to certain relief provisions under the German Act on Measures under the Law of Companies, Cooperative Societies, Associations, Foundations and Condominium Property to Combat the Effects of the COVID-19 Pandemic (*Gesetz über Maßnahmen im Gesellschafts-, Genossenschafts-, Vereins-, Stiftungs- und Wohnungseigentumsrecht zur Bekämpfung der Auswirkungen der COVID-19-Pandemie*), as amended). This notice period shall be extended by the days of the attendance notification period described in the preceding paragraph.

While the general shareholders' meeting is generally convened by the Executive Board, if the interests of the Company so require, the general shareholders' meeting of the Company can also be convened by the Supervisory Board. Pursuant to the German Stock Corporation Act (*Aktiengesetz*), shareholders whose shares constitute at least 5% of the share capital of the Company may demand that the general shareholders' meeting of the Company be convened; this demand must be made in writing, stating the purpose of the meeting and be directed to the Executive Board. Using the same procedure, shareholders whose aggregated shares constitute at least 5% of the Company's share capital or an interest of EUR 500,000.00 may demand that items be added to the agenda of a general shareholders' meeting. In addition, shareholders must prove that they have owned their shares for at least three months and that they will hold their shares until their motion has been decided upon. If the demand is not met by the Company, a court may authorize the shareholders who issued the demand to convene the general shareholders' meeting of the Company. The convening notice or publication must make reference to such authorization. Shareholders or shareholders' associations can use the shareholder forum of the German Federal Gazette (*Bundesanzeiger*) to either put forward a joint request or to put forward a request on behalf of the shareholders for a general shareholders' meeting.

The general shareholders' meeting of the Company votes, in particular, on the appropriation of the distributable profit (*Bilanzgewinn*), the election of the Company's auditor, the discharge (*Entlastung*) of the Executive Board and Supervisory Board members, the election of the members of the Supervisory Board.

Each Share entitles its holder to one vote at the general shareholders' meeting. The voting right enters into effect upon full payment of the contribution. Voting rights can be exercised through a proxy holder. Authority to vote by proxy must be granted in text form (*Textform*) in accordance with Section 126b German Civil Code (*Bürgerliches Gesetzbuch*). According to the Articles of Association, resolutions of the general shareholders' meeting of the Company are generally adopted by a simple majority of the votes cast and, in case a majority of the share capital represented at the

adoption of the resolution is required, by a simple majority of the share capital represented at the adoption of the resolution, unless larger majorities or other requirements are stipulated by mandatory statutory law or the Articles of Association.

Pursuant to the German Stock Corporation Act (*Aktiengesetz*), resolutions of fundamental importance (*grundlegende Bedeutung*) mandatorily require – in addition to a majority of the votes cast – a majority of at least three quarters of the registered share capital represented at the time the resolution is adopted. Resolutions of fundamental importance include:

- changes to the purpose/objects of the Company;
- capital increases without subscription rights for existing shareholders;
- capital reductions;
- the creation of authorized or conditional capital;
- restructurings and transformations pursuant to the German Transformation Act (*Umwandlungsgesetz*), including mergers, divisions, certain transfers of assets and changes in legal form;
- an agreement to transfer all of the Company's assets pursuant to Section 179a German Stock Corporation Act (*Aktiengesetz*);
- the execution of intra-group agreements (in particular control and profit and loss transfer agreements);
- the dissolution of the Company.

Neither German law nor the Articles of Association limit the rights of shareholders who do not reside in Germany or who are foreign shareholders in relation to holding Shares and exercising the voting rights pertaining to the Shares.

The rights of the shareholders can generally only be amended with the consent of the affected shareholders. However, there are circumstances, set out by law, in which a majority of three quarters is sufficient. Currently, there are no provisions in the Articles of Association that deviate from the statutory provisions regarding the scope of amending shareholders' rights.

16.7. Corporate Governance and Compliance

16.7.1. Corporate Governance

The Company takes good corporate governance to mean responsible enterprise management and supervision geared to sustainable value creation. In particular, the Company strives to further foster the trust placed in our Group by investors, business partners and employees, and the public at large. The Company also attaches great importance to the efficient conduct of the work by the Executive Board and the Supervisory Board, good cooperation between these bodies and with the Company's staff, and to open and maintain transparent corporate communications.

The corporate structure of the Company is based on the responsible, transparent and efficient leadership and control of the Company. The Company therefore identifies itself with the objectives of the Governance Code. The Executive Board and the Supervisory Board, as well as all management personnel and employees of the Company are required to comply with these objectives. The Executive Board is responsible for compliance with the principles of corporate governance.

The Governance Code includes recommendations (*Empfehlungen*), that the Company "shall" (*soll*) follow, and suggestions (*Anregungen*), that the Company "should" (*sollte or kann*) follow, for the management and supervision of companies listed on German stock exchanges with regard to good corporate governance. The current version of the Governance Code is available on the website of the Commission of the German Corporate Governance Code (http://www.corporate-governance-code.de). While suggestions of the Governance Code are not mandatory, Section 161 German Stock Corporation Act (*Aktiengesetz*) requires the management and supervisory boards of a listed company to annually disclose which recommendations have been and will be complied with, and in the event of non-compliance, to provide the reason for such non-compliance. This declaration must be made permanently accessible to shareholders. The contents of the declaration do not bind the Executive Board or Supervisory Board for the future, however, any deviation from the previous declaration triggers the obligation to submit, publish and provide shareholders with an amended declaration in due course. In contrast, deviations from the suggestions contained in the Governance Code need not be disclosed.

The Executive Board and the Supervisory Board issued the last declaration of compliance in accordance with Section 161 para. 1 German Stock Corporation Act (*Aktiengesetz*) in October 2020 as follows:

"The Executive Board and the Supervisory Board of Epigenomics AG hereby declare that, since the last declaration of compliance in October 2019, Epigenomics AG has complied with the recommendations of the German Government Commission on the German Corporate Governance Code (hereinafter also "Code") in the version of February 7, 2017 (hereinafter also "Code 2017") until the entry into force of the Code in the version adopted by the German Government Commission on December 16, 2019, on March 20, 2020 (hereinafter also "Code 2020"), with the exceptions set forth below:

Section 3.8 paragraph 3 Code 2017

Epigenomics AG has taken out a D&O policy. The insured persons also include the members of the Supervisory Board. Deviating from Section 3.8 paragraph 3, the D&O policy does not provide for a deductible for members of the Supervisory Board. We did not consider such a deductible to be adequate taking into account the nature of the office as member of the Supervisory Board and the function of the Supervisory Board.

Section 4.1.3 sentence 3 Code 2017

The company does not have a separate system that employees can use to report, in a protected manner, suspected breaches of the law within the company. Owing to its size and organization, the company does not believe that it is necessary to implement such a system. Accordingly, the company deviated from the recommendation pursuant to Section 4.1.3 sentence 3 Code 2017.

Section 5.1.2 paragraph 1 sentence 2 and paragraph 2 sentence 3 and Section 5.4.1 paragraph 2 sentences 1 and 2 and paragraph 4 Code 2017

In the past, when filling the positions in its bodies, the Executive Board and the Supervisory Board considered the company-specific situation, and also made allowances for potential conflicts of interest, as well as the international activities of the company through an appropriate diversity of their members, as well as the appointment of an adequate number of independent Supervisory Board members. Furthermore, the Supervisory Board determined a maximum term of membership and prepared a profile of skills and expertise for the entire Supervisory Board. In deviation from the recommendations in Section 5.1.2 paragraph 2 sentence 3 and in Section 5.4.1 paragraph 2 sentence 2 Code 2017, we however consider the commitment to institute special age limits for

members of the Executive Board and the Supervisory Board as an inadequate limitation of the voting rights of our shareholders. In addition, we are convinced that sweeping requirements for the composition of the Executive Board as requested in Section 5.1.2 paragraph 1 sentence 2 constrain the Supervisory Board inadequately in its selection of suitable members of the Executive Board. The same applies accordingly to the specification of sweeping objectives regarding the composition of the Supervisory Board, as required in Section 5.4.1 paragraph 2 sentences 1 and 2 and assumed in Section 5.4.1 paragraph 4. We strive to achieve an appropriate diversity in the Executive Board and the Supervisory Board and to ensure that an adequate number of independent Supervisory Board members is elected. However, it is ultimately in the corporate interest to appoint as members of the Executive Board and the Supervisory Board the most suitable male or female candidates. Furthermore, the Supervisory Board has defined gender diversity objectives for the proportion of women in both the Executive Board and the Supervisory Board in accordance with Section 111 paragraph 5 of the Stock Corporation Act (Aktiengesetz – AktG). We therefore believe that (additional) sweeping requirements constitute an inadequate limitation of the individual selection of suitable male and female candidates for the Executive Board or the Supervisory Board. Furthermore, a target requirement regarding the composition of the Supervisory Board also inadequately impairs our shareholders' right to elect the Supervisory Board members. Accordingly, we did not comply with these recommendations of the Code 2017.

Sections 5.3.1 sentence 1, and 5.3.3 Code 2017

Due to the size of the company, the Supervisory Board did not believe that it is necessary to form a Nomination Committee composed exclusively of shareholder representatives which recommends suitable Supervisory Board candidates for the proposals of the Supervisory Board to the general shareholders' meeting. Rather, this task was performed by the full Supervisory Board. Owing to the size of the company and of the Supervisory Board, the Supervisory Board considers it adequate and appropriate to form only an Audit Committee. In contrast, the implementation of further committees was in the opinion of the Supervisory Board not necessary. Hence, the Company has deviated from the recommendations pursuant to Sections 5.3.1 sentence 1 and 5.3.3 Code 2017.

Furthermore, the Executive Board and Supervisory Board of Epigenomics AG hereby declare that the recommendations of the Code 2020 have been and will be complied with since its entry into force on March 20, 2020, with the following exceptions:

Recommendation A.2 sentence 2 Code 2020

The Company does not have a separate system that employees can use to report, in a protected manner, suspected breaches of the law within the company. Owing to its size and organization, the company does not believe that it is necessary to implement such a system. Accordingly, the company deviates from the recommendation A.2 sentence 2 halfsentence 1 Code 2020.

Recommendations B.1, B.5, C.1 and C.2 Code 2020

In the past, when filling the positions in its bodies, the Executive Board and the Supervisory Board considered the company-specific situation, and also made allowances for potential conflicts of interest, as well as the international activities of the company through an appropriate diversity of their members, as well as the appointment of an adequate number of independent Supervisory Board members. Furthermore, the Supervisory Board determined a maximum term of membership and prepared a profile of skills and expertise for the entire Supervisory Board. In deviation from the recommendations B.5 and C.2 Code 2020, we however consider the commitment to institute special age limits for members of the Executive Board and the Supervisory Board as an inadequate limitation of the voting rights of our shareholders. Accordingly, contrary to recommendations B.5 and C.2 Code 2020, no such age limits are stated in the declaration of governance. In addition, we are

convinced that sweeping requirements for the composition of the Executive Board as requested in recommendation B.1 constrain the Supervisory Board inadequately in its selection of suitable members of the Executive Board. The same applies accordingly to the specification of sweeping objectives regarding the composition of the Supervisory Board, as required in recommendation C.1 sentence 1 and sentence 2 Code 2020. We strive to achieve an appropriate diversity in the Executive Board and the Supervisory Board and to ensure that an adequate number of independent Supervisory Board members is elected. However, it is ultimately in the corporate interest to appoint as members of the Executive Board and the Supervisory Board the most suitable male or female candidates. Furthermore, the Supervisory Board has defined gender diversity objectives for the proportion of women in both the Executive Board and the Supervisory Board in accordance with Section 111 paragraph 5 of the Stock Corporation Act (Aktiengesetz – AktG). We therefore believe that (additional) sweeping requirements constitute an inadequate limitation of the individual selection of suitable male and female candidates for the Executive Board or the Supervisory Board. Furthermore, a target requirement regarding the composition of the Supervisory Board also inadequately impairs our shareholders' right to elect the Supervisory Board members. Accordingly, we did not comply and will not comply with these recommendations of the Code 2020. In the absence of concrete targets for the composition of the Supervisory Board, the status of the implementation of such targets is not published in the declaration of governance in deviation from recommendation C.1 sentence 4 of the Code 2020.

Recommendations D.2 sentence 1 and D.5 Code 2020

Due to the size of the company, the Supervisory Board did not and does not believe that it is necessary to form a Nomination Committee composed exclusively of shareholder representatives which recommends suitable Supervisory Board candidates for the proposals of the Supervisory Board to the general shareholders' meeting. Rather, this task is being performed by the full Supervisory Board. Owing to the size of the company and of the Supervisory Board, the Supervisory Board considers it adequate and appropriate to form only an Audit Committee. In contrast, the implementation of further committees was and is in the opinion of the Supervisory Board not necessary. Hence, the Company has deviated and will continue to deviate from the recommendations D.2 sentence 1 and D.5 Code 2020.

Recommendation F.2 Code 2020

The company has published the consolidated financial statements and the Group management report for the fiscal year 2019 on April 29, 2020. Contrary to recommendation F.2 of the Code 2020, the consolidated financial statements and the Group management report have not been published within 90 days from the end of the fiscal year. The deviation has been taken against the background of the general uncertainty expected by the company because of the coronavirus (COVID-19) and with the intention of ensuring maximum safety of employees, customers, suppliers and fellow citizens. In the upcoming years, the company intends to publish the consolidated financial statements and the group management report again within 90 days from the end of the fiscal year.

Recommendations G.1, G.3, G.4 and G.11 Code 2020

Section G.I. of the Code 2020 contains new recommendations on the remuneration of the Executive Board. The company does not fully comply with all new recommendations. The deviations relate to the following recommendations:

— Recommendation G.1 first and third indent Code 2020: The Company's current remuneration system does not contain any provisions on the (individual) maximum remuneration of the members of the Executive Board or on non-financial performance criteria for the granting of variable remuneration components. The Supervisory Board has agreed a maximum amount for each

compensation component with each member of the Executive Board. The maximum remuneration can be mathematically derived from this amount. The Supervisory Board has therefore not yet considered an additional separate determination of a maximum remuneration to be reasonable. Non-financial performance criteria are not included in the current remuneration system because the pursuit of certain financial and strategic goals appears to be a priority in view of the Company's situation.

— Recommendations G.3 and G.4 Code 2020: No peer group of other third-party entities has been used to assess the customary level of the current Executive Board remuneration, nor has any vertical compensation comparison been made. In the absence of a peer group of other third-party entities, their composition has not been disclosed. Horizontal and vertical comparison did not appear meaningful so far due to the characteristics of the company and its size.

— Recommendation G.11 sentence 1 Code 2020: The Supervisory Board takes extraordinary developments into account by means of caps for the individual remuneration components; the caps ensure that the variable remuneration is adjusted "downwards" in the event of extraordinary developments. Conversely, however, in deviation from recommendation G.11, the Supervisory Board does not have the possibility to adjust "upwards" any compensation that is inappropriately low due to extraordinary developments. Until now, the regulatory framework for such an "upward" adjustment option seemed unclear and the practical need did not seem to be urgent.

— Recommendation G.11 sentence 2 Code 2020: The Supervisory Board currently has no possibility to retain or reclaim variable remuneration in justified cases. Against the background of legal uncertainties existing in the past, the introduction of such a possibility has so far been refrained from.

The Supervisory Board will adopt a new remuneration system for the members of the Executive Board and submit it to the Annual General Shareholders' Meeting in 2021 for approval. As part of the development and adoption of the new system, the Supervisory Board will also decide on future compliance with the above recommendations."

16.7.2. Group Compliance

We have established a comprehensive system to identify, assess, communicate and manage opportunities and risks across all of our operations. The principles and guidelines underlying our risk management are documented in a group-wide policy. The purpose of this policy is to help identify risks systematically at the earliest possible stage, estimate their likelihood of occurrence, as well as potential qualitative and quantitative impact, and design and implement effective countermeasures. We regularly review our risk management system at the operational level and at the Executive Board and Supervisory Board levels.

We have adopted a Code of Business Conduct and Ethics (the "**Code of Conduct**") which is applicable to all of our employees and executive officers, as well as to third parties commissioned by employees of Epigenomics. The Code of Conduct covers a broad range of matters, including advertising for diagnostic medical devices and the regulated cooperation of the Company with healthcare professionals in the areas of research, development, manufacturing and the distribution of diagnostic products.

17. TRANSACTIONS AND RELATIONSHIPS WITH RELATED PARTIES

In accordance with IAS 24, transactions with persons or companies which are, *inter alia*, members of the same group as the Company or which are in control of or controlled by the Company must be disclosed, unless they are already included as consolidated companies in Epigenomics Group's audited consolidated financial statements. Control exists if a shareholder owns more than one half of the voting rights in the Company or, by virtue of an agreement, has the power to control the financial and operating policies of the Company's management. The disclosure requirements under IAS 24 also extend to transactions with associated companies (including joint ventures), as well as transactions with persons who have significant influence on the Company's financial and operating policies, including close family members and intermediate entities. This includes the members of the Executive Board and Supervisory Board and close members of their families, as well as those entities over which the members of the Executive Board and Supervisory Board or their close family members are able to exercise a significant influence or in which they hold a significant share of the voting rights.

The Company compensates the members of its Executive Board and Supervisory Board in cash and, with respect to the members of the Executive Board, stock options (see *16.2.3. "Governing Bodies — Executive Board — Compensation, Other Benefits, Share Ownership"* and *16.3.3. "Governing Bodies — Supervisory Board — Compensation, Other Benefits, Share Ownership"*).

Based on a voting rights notification published May 27, 2021, Wilhelm K. T. Zours indirectly (via Deutsche Balaton and other companies) controlled more than 20% of the Shares and voting rights resulting therefrom, and, as a result, Mr. Wilhelm K. T. Zours and Deutsche Balaton, are deemed to be related parties of the Company in accordance with IAS 24. On June 11, 2021, the Company entered into the Backstop Agreement 2021 with Deutsche Balaton, subsequently amended on August 20, 2021, under which Deutsche Balaton was entitled to a commission in the amount of EUR 635,250.00 which was paid on July 2, 2021, a portion of which in the amount of EUR 57,750.00 is to be refunded pursuant to the amendment (see 11.2.2. *"Material Agreements — The New Bonds — Backstop Agreement with Deutsche Balaton in 2021"*).

Other than disclosed above, there have been no transactions with related parties in the financial years 2020, 2019 and 2018, as well as the current financial year up to and including the date of the Prospectus.

18. TAXATION OF BONDHOLDERS IN GERMANY

The following is a general discussion of certain German tax consequences resulting from the acquisition, ownership and disposition of the New Bonds. This discussion does not purport to be a comprehensive description of all tax considerations that may be relevant to a decision to purchase the New Bonds. In particular, this discussion does not consider any specific facts or circumstances that may apply to a particular investor subject to special tax regimes, such as banks, insurance companies, investment funds or tax-exempt organizations. Although any information given hereafter reflects the opinion of the Issuer, it must not be misunderstood as creating any sort of reliance nor as a representation or guarantee, and courts or other relevant authorities may come to different interpretations of the applicable laws. This summary is based on the laws (including tax treaties) currently in force and as applied on the date of this offering memorandum in the Federal Republic of Germany, which are subject to change, possibly with retroactive effect. We have not sought, and will not seek, a binding ruling from German tax authorities as to any of the tax consequences described herein. The German tax authorities may disagree with the discussion herein, and its determination might be upheld by a court. Moreover, there can be no assurance that future legislation, regulations, administrative rulings or court decisions will not change the accuracy of this discussion.

PROSPECTIVE INVESTORS OF THE NEW BONDS ARE ADVISED TO CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF THE NEW BONDS, INCLUDING THE EFFECT OF ANY STATE OR LOCAL TAXES UNDER THE TAX LAWS APPLICABLE IN THE FEDERAL REPUBLIC OF GERMANY AND EACH COUNTRY OF WHICH THEY ARE RESIDENTS OR WHOSE TAX LAWS APPLY TO THEM FOR OTHER REASONS.

The Company does not assume any responsibility for the deduction of withholding tax (including the solidarity surcharge and, if applicable, the church tax thereon) at source.

18.1. Taxation of Sale, Transfer, Disposal or Redemption of the New Bonds

18.1.1. German Tax Resident Investors

This subsection "German Tax Resident Investors" refers to persons who are tax resident in Germany (*i.e.*, persons whose residence, habitual abode, statutory seat or place of management is located inside Germany).

18.1.1.1. Withholding Tax

Capital gains realized by German Tax Resident Investors from the sale, transfer, disposal or redemption of the New Bonds (including gains from the assignment or hidden contribution of the New Bonds) will generally be subject to withholding tax if a Disbursing Agent keeps the New Bonds in custody or administers the New Bonds or carries out the disposal of the New Bonds and pays out or credits the investment income, or a Disbursing Agent pays out or credits the investment income against delivery of the partial debenture to someone other than a foreign credit institution or financial services institution ("**Over-The-Counter Transaction**", *Tafelgeschäft*). "**Disbursing Agents**" (*inländische Zahlstellen*) which are required to deduct the withholding tax are German resident credit institutions and financial services institutions (including in both cases German branches of foreign institutions), German securities trading companies or securities trading banks, or – if no German

resident credit institution or financial services institution is the Disbursing Agent – subject to the same requirements the Issuer.

The applicable withholding tax rate is 25% (plus a 5.5% solidarity surcharge thereon, resulting in a total withholding of 26.375%, plus, if applicable, church tax). Church tax is generally levied by way of withholding as well unless the bondholder has filed a blocking notice (*Sperrvermerk*) with the German Federal Tax Office (*Bundeszentralamt für Steuern*) in which case the bondholder is required to include the investment income in his or her income tax return and the church tax will then be levied by way of an assessment.

Subject to exceptions, the amount of capital gains on which the withholding tax charge is applied is generally the difference between the proceeds received upon the sale, transfer, disposal or redemption of the New Bonds and (after the deduction of actual expenses directly related thereto) the acquisition costs. If New Bonds kept or administered in the same custodial account have been acquired at different points in time, the New Bonds first acquired will be deemed to have been sold first for the purpose of determining the capital gains. If the New Bonds have not been kept in a custodial account with the same Disbursing Agent since their acquisition and the current Disbursing Agent has not been notified of the actual acquisition costs of the New Bonds in the form required by law, or if the gains are realized by way of an Over-The-Counter-Transaction with a Disbursing Agent, tax at a rate of 25% (plus a 5.5% solidarity surcharge and, if applicable, church tax thereon) will be imposed on an amount equal to 30% of the proceeds from the sale, transfer, disposal or redemption of the New Bonds.

In computing any withholding tax, the Disbursing Agent generally deducts from the withholding tax base negative investment income (*e.g.,* accrued interest paid upon the acquisition of a security and losses from the sale of other securities with the exception of shares) realized by the Private Individual Investor *via* the Disbursing Agent and carries forward any losses that cannot be offset to the following year. If losses cannot be offset in full against positive investment income by the Disbursing Agent in the current year, the investor can, instead, request that the Disbursing Agent issues a certificate stating the losses in order for them to be offset against other positive income from capital investments or carried forward in the assessment procedure. The request must reach the Disbursing Agent by December 15, of the current year and is irrevocable. In addition, subject to certain requirements and restrictions, the Disbursing Agent credits foreign withholding taxes levied on investment income in a given year regarding securities held by a Private Individual Investor in the custodial account with the Disbursing Agent.

Upon a Private Individual Investor filing an exemption certificate (*Freistellungsauftrag*) with the Disbursing Agent, no withholding tax is applied in the amount shown on the exemption certificate, with a maximum exemption of EUR 801 (EUR 1,602 for individuals filing jointly). No withholding tax will be levied either if a Private Individual Investor has submitted to the Disbursing Agent a certificate of non-assessment (*Nichtveranlagungs-Bescheinigung*) which also includes the tax identification number and which has been issued by the competent German tax office.

Business Investors in the form of corporations will generally not be subject to withholding tax on gains from the sale, transfer or redemption of the New Bonds or the separate disposition of interest coupons or interest claims, provided that in the case of entities of certain legal forms the status of the entity has been evidenced by a certificate of the competent tax office. The same applies upon notification by use of the officially prescribed form towards the Disbursing Agent in the case of New Bonds held by individuals or partnerships as business (and not as private) assets.

18.1.1.2. Private Individual Investors

For Private Individual Investors who do not hold a Qualified Holding in the Issuer (see below) the withholding tax is – without prejudice to certain exceptions – definitive and satisfies the Private Individual Investor's income tax liability (including solidarity surcharge and, if applicable, church tax) with respect to the relevant income from the investment in the New Bonds (so-called "**Flat Tax**", *Abgeltungsteuer*).

The coalition agreement between the German Christian Democratic Party and the German Social Democratic Party dated February 7, 2018 provides that the Flat Tax regime shall be partially abolished for certain capital investment income. That means, however, that income received by Private Individual Investors may be taxed at individual progressive income tax rates of up to 45% in the future (plus, if applicable, solidarity surcharge and church tax thereon). There is, however, no draft bill available yet and the details are hence still uncertain.

Under the Flat Tax regime, Private Individual Investors can apply in their income tax return to have their income assessed in accordance with the general rules on determining an individual's tax bracket if this results in a lower tax burden. Also in this case, income-related expenses (other than actual expenses directly related to a disposal) cannot be deducted from the investment income, except for the annual lump sum deduction (*Sparer-Pauschbetrag)* of EUR 801 (EUR 1,602 for individuals filing jointly). If the tax on the income from the New Bonds is assessed, any tax withheld by the Disbursing Agent will be credited against the Private Individual Investor's income tax liability and, to the extent the withheld amount exceeds the actual income tax liability, refunded to the Private Individual Investor.

To the extent withholding tax has not been levied, such as in the case of New Bonds kept in custody abroad or if no Disbursing Agent is involved in the payment process, the Private Individual Investor must report his or her interest income and capital gains derived from the New Bonds in his or her tax return and then will also be taxed at a rate of 25% (plus a 5.5% solidarity surcharge and, if applicable, church tax thereon).

If the withholding tax on a sale, transfer, disposal or redemption of the New Bonds has been calculated from 30% of the respective proceeds (rather than from the actual gain), a Private Individual Investor may and in case the actual gain is higher than 30% of the respective proceeds (and, according to administrative guidance, the difference between the actual gain and 30% of the respective proceeds is more than EUR 500) must apply for an assessment on the basis of his or her actual acquisition costs. Also in this case, income-related expenses (other than actual expenses directly related to the disposal) cannot be deducted from the investment income, except for the aforementioned annual lump sum deduction.

Losses resulting from the sale, transfer or redemption of the New Bonds can only be offset against income derived from other capital investment. In the event that a set-off is not possible in the assessment period in which the losses have been realized, such losses can be carried forward into future assessment periods and offset against capital investment income generated in future assessment periods. Losses arising from the fact that a receivable is fully or partially irrecoverable or arising from the fact that the receivables under the New Bonds are cancelled as worthless and losses arising from a transfer of a worthless New Bond to a third party or from any other default can be offset up only up to an amount of EUR 20,000; losses in excess of EUR 20,000 will be carried forward and offset against capital investment income per subsequent year only up to an amount of EUR 20,000. Such losses carried forward have to be reported by the Private Individual Investor in his/her tax return. In case the investor desires to use his/her losses to the extent that they have not been offset by the Disbursing Agent, the investor can request a certificate regarding the amount of losses that have not been offset already so that such losses cannot be credited any more against

eligible gains by the Disbursing Agent. In case the investor does not request such certificate, respective losses are credited against eligible gains by the Disbursing Agent.

If the Qualified Holding, the capital gain deriving from the disposal of the shares is not subject to the flat-rate withholding tax, but to the progressive income tax regime. In this case the partial income method applies to gains on the disposal of shares, which means that only 60.0% of the capital gains are subject to tax and only 60.0% of the losses on the disposal and expenses economically related thereto are tax deductible. Even though withholding tax is withheld by a Domestic Paying Agent in the case of a Qualified Holding, this does not satisfy the tax liability of the shareholder. Consequently, a shareholder must declare his or her capital gains in his or her income tax returns. The withholding tax (including the solidarity surcharge and church tax, if applicable) withheld and paid will generally be credited against the shareholder's income tax liability on his or her tax assessment (including the solidarity surcharge and any church tax if applicable) or refunded in the amount of any excess.

For Private Individual Investors who hold a Qualified Holding, the capital gain deriving from the disposal of the New Bonds is not subject to the Flat Tax regime, but to the progressive income tax regime. A "**Qualified Holding**" is present if the bondholder or, in the event of a gratuitous transfer, its legal predecessor, or, if the shares have been gratuitously transferred several times in succession, one of his or her legal predecessors, at any point during the five years preceding the disposal directly or indirectly held at least 1.0% of the share capital of the Issuer; for purposes of calculating the 1.0% ratio, the (nominal) value of the New Bonds should not be treated as forming part of the share capital. The disposal of the New Bond by a Private Individual Investor with a Qualified Holding should be deemed to be trading income such that the withholding tax levied on the capital gains should not satisfy the tax liability. The capital gains should be 60% taxable at the individual progressive tax rate of the bondholder, known as the partial income method (*Teileinkünfteverfahren*).The partial income method does not apply with respect to church tax (if applicable). Only 60.0% of the business expenses economically related to the dividends are tax-deductible Consequently, a bondholder must declare his or her capital gains in his or her income tax returns. The withholding tax (including the solidarity surcharge and church tax, if applicable) withheld and paid will generally be credited against the shareholder's income tax liability on his or her tax assessment (including the solidarity surcharge and any church tax if applicable) or refunded in the amount of any excess.

18.1.1.3. Business Investors

In case of Business Investors as German tax resident individuals or tax resident corporations (*i.e.*, corporations whose legal domicile or place of effective management is located in Germany), including via a partnership, capital gains from the sale, transfer, disposal or redemption of the New Bonds are generally subject to German income tax or corporate income tax (in each case plus solidarity surcharge and, if applicable in the case of individual investors, church tax thereon). The Business Investor is required to report the income and related (business) expenses in its tax return and will be taxed at its applicable tax rate. Any withholding tax deducted from capital gains is, subject to certain requirements, creditable as advance payment against the investor’s corporate or individual income tax liability (plus solidarity surcharge and, if applicable in the case of individual investors, church tax thereon). To the extent the amount withheld exceeds the (corporate) income tax liability, the withholding tax is, as a rule, refundable.

The capital gains are also subject to trade tax if the New Bonds are attributable to a German permanent establishment of a trade or business. If the investor is an individual or an individual partner of a partnership, the trade tax may be completely or in part credited against the individual’s income tax liability pursuant to a lump sum method.

18.1.2. Foreign Tax Resident Investors

This subsection "*Foreign Tax Resident Investors*" refers to persons who are not tax resident in Germany (*i.e.,* persons having neither of their residence, habitual abode, statutory seat or place of management inside Germany).

Foreign investors are generally not subject to German taxation with their capital gains from the investment in the New Bonds. Therefore, generally no German withholding tax is withheld from such income, even if the New Bonds are held in custody with a Disbursing Agent.

However, exceptions apply if the income from the New Bonds constitutes German-source income. This is the case if the New Bonds form part of the business property of a permanent establishment maintained inside Germany or are attributable to the business income derived through a German permanent representative appointed by the investor, or if capital gains are realized by way of an Over-the-Counter-Transaction. This is also the case if the Private Individual Investor making the disposal hold a Qualified Holding, in which case the partial income method (*Teileinkünfteverfahren*) should apply (cf. *18.1.1.2. "— German Tax Resident Investors — Private Individual Investors"*).

In these exceptional cases, the capital gain is generally subject to German taxation and may also be subject to withholding tax as described above in subsection *Withholding Tax*.

Subject to certain prerequisites, however, a Foreign Tax Resident Investor may benefit from a relief under an applicable double taxation treaty, since most double taxation treaties assign the right of taxation of capital gains to the shareholder's country of residence.

18.2. Taxation of Exercise of Conversion Right

The income tax implications of the exercise of the conversion right and the acquisition of the shares in the Issuer depend on whether the investor holds the New Bonds as Business Assets or as Non-Business Assets.

If the New Bonds are held by an individual as Non-Business Assets and such individual does not hold a Qualified Holding, the conversion is generally treated as a taxable disposal of the New Bonds. However, the proceeds from such disposal are deemed to be equal to the costs for the acquisition of the New Bonds, such that the taxable gain is effectively zero. The costs for the acquisition of the shares in the Issuer shall be equal to the costs for the acquisition of the New Bonds.

In case of any other investor, the conversion does, in the view of the tax authorities, not constitute a taxable disposal of the New Bonds and therefore not trigger any taxable capital gains (or capital losses). Therefore, the acquisition costs for the New Bonds should be rolled over as acquisition cost of the Shares. Insofar as the German tax authorities assume that the conversion of contingent convertible bonds, which create additional tier 1 (AT 1) instruments for regulatory purposes in the banking sector, is to be treated as a contribution of the New Bonds into the issuer, this statement is – as explicitly stated in the relevant decree – applicable solely to convertible AT 1 instruments, and should in our view not have a bearing on regular convertible bonds.

For the reasons set out above, the conversion of the New Bonds should also for non-resident investors not result in taxable income in Germany.

18.3. Inheritance and Gift Tax

Inheritance or gift taxes with respect to the New Bonds will, in principle, arise under German law if (i), in the case of inheritance tax, either the decedent or the beneficiary or, in the case of gift tax, either the donor or the donee is a resident of Germany at the relevant point in time, or (ii) the New Bonds are attributable to a German trade or business for which a permanent establishment is maintained or a permanent representative has been appointed in Germany, or (iii) the claims under the New Bonds are directly or indirectly secured by German-situs real estate or ships which are registered with a German ship register (unless the New Bonds qualify as bonds which are issued as partial debentures). In addition, certain German expatriates will be subject to inheritance and gift tax. However, applicable double taxation treaties may provide for exceptions to the German domestic inheritance and gift tax regulations.

18.4. Other Taxes

No stamp, issue, registration or similar taxes or duties will be payable in in connection with the issuance, delivery or execution of the New Bonds. Currently, net assets tax (*Vermögensteuer*) is not levied in Germany. With respect to the proposals for the introduction of a financial transaction tax, see *19.7. "Taxation of Shareholders in Germany — Other Taxes"*.

19. TAXATION OF SHAREHOLDERS IN GERMANY

The tax laws of any jurisdiction with authority to impose taxes on the Company's shareholders and the tax laws of the Company's country of incorporation (i.e., Germany) may have an impact on the income received from the shares.

The following section presents a number of key German taxation principles which generally are or can be relevant to the acquisition, holding or transfer of shares both by a shareholder (an individual, a partnership or corporation) that has a tax domicile in Germany (that is, whose place of residence, habitual abode, registered office or place of management is in Germany) and by a shareholder without a tax domicile in Germany. The information is not exhaustive and does not constitute a definitive explanation of all possible aspects of taxation that could be relevant for shareholders. The information is based on the tax laws in force in Germany as of the date of the Prospectus (and their interpretation by administrative directives and courts), as well as typical provisions of double taxation treaties that Germany has concluded with other countries. Tax law can change – sometimes retrospectively. We have not sought, and will not seek, a binding ruling from German tax authorities as to any of the tax consequences described herein. Moreover, it cannot be ruled out that the German tax authorities or courts may consider an alternative interpretation or application to be correct that differs from the one described in this section.

This section cannot serve as a substitute for tailored tax advice to individual shareholders. Shareholders are therefore advised to consult their tax advisers regarding the tax implications of the acquisition, holding or transfer of shares and regarding the procedures to be followed to achieve a possible reimbursement of German withholding tax (Kapitalertragsteuer). Only such advisers are in a position to take the specific tax-relevant circumstances of individual shareholders into due account.

The Company does not assume any responsibility for the deduction of withholding tax (including the solidarity surcharge and, if applicable, the church tax thereon) at source.

19.1. Income Tax Implications of the Holding, Sale and Transfer of Shares

In terms of the taxation of shareholders of the Company, a distinction must be made between taxation in connection with the holding of shares (see *19.2. "— Taxation of Dividends*") and taxation in connection with the sale of shares (see *19.3. "— Taxation of Capital Gains*") and taxation in connection with the gratuitous transfer of shares (see *19.5. "— Inheritance and Gift Tax*").

19.2. Taxation of Dividends

19.2.1. Withholding Tax

As a general rule, dividends distributed to the shareholder are subject to a withholding tax (*Kapitalertragsteuer*) of 25.0% and a solidarity surcharge of 5.5% thereon (*i.e.*, 26.375% in total plus church tax, if applicable). This, however, will not apply if and to the extent that dividend payments are funded from the Company's contribution account for tax purposes (*steuerliches Einlagekonto; § 27 Körperschaftsteuergesetz*, "**KStG**"); in this case no withholding tax will be withheld. However, these payments will reduce the acquisition costs of the shares and may, consequently, result in or increase a taxable gain upon the disposal of the shares (see *19.3. "— Taxation of Capital Gains*"). The assessment basis for the withholding tax is the dividend approved by the general shareholders' meeting.

If shares – as it is the case with the shares in the Company – are admitted for collective custody by a central securities depository (*Wertpapiersammelbank*) pursuant to Section 5 German Act on Securities Accounts (*Depotgesetz*) and are entrusted to such bank for collective custody (*Sammelverwahrung*) in Germany, the withholding tax is withheld and passed on for the account of the shareholders (i) by the domestic credit or financial services institution (*inländisches Kredit- oder Finanzdienstleistungsinstitut*) (including domestic branches of such foreign enterprises), by the domestic securities trading company (*inländisches Wertpapierhandelsunternehmen*) or by the domestic securities trading bank (*inländische Wertpapierhandelsbank*) which keeps or administers the shares and disburses or credits the dividends to the shareholder or disburses the dividends to a foreign agent, (ii) by the central securities depository (*Wertpapiersammelbank*) to which the shares were entrusted for collective custody if the dividends are disbursed to a foreign agent by such central securities depository (*Wertpapiersammelbank*) or (iii) by the Company itself if and to the extent shares held in collective custody (*Sammelverwahrung*) by the central securities depository (*Wertpapiersammelbank*) are treated as so-called "*abgesetzte Bestände"* (stock being held separately) (hereinafter in all cases, the "**Dividend Paying Agent**"). Aside from the case of stock being held separately, the Company does not assume any responsibility for the withholding of the withholding tax.

In general, the withholding tax must be withheld without regard as to whether and to what extent the dividend is exempt from (corporate) income tax at the level of the shareholder and whether the shareholder is domiciled in Germany or abroad.

However, withholding tax on dividends distributed to a company domiciled in another EU Member State within the meaning of Article 2 of the Council Directive 2011/96/EU of November 30, 2011, as amended ("**Parent-Subsidiary Directive**"), may be refunded upon application and subject to further conditions. This also applies to dividends distributed to a permanent establishment of such a parent company in another EU Member State or to a parent company that is subject to unlimited tax liability in Germany, provided that the participation in the Company is actually part of such permanent establishment's business assets. Further requirements for the refund of withholding tax under the Parent-Subsidiary Directive are that the shareholder has directly held at least 10.0% of the Company's registered share capital continuously for one year and that a respective application is filed with the German Federal Central Tax Office (*Bundeszentralamt für Steuern, Hauptdienstsitz Bonn-Beuel*, An der Küppe 1, D-53225 Bonn, Germany). If, in the case of a holding of at least 10.0% of the Company's registered share capital, shares held in collective custody (*Sammelverwahrung*) by the German central securities depository (*Wertpapiersammelbank*) Clearstream Banking AG are treated as so-called "*abgesetzte Bestände*" (stock being held separately), the German tax authorities will not object when the main paying agent (*Hauptzahlstelle*) of the Company upon presentation of a valid exemption certificate (*Freistellungsbescheinigung*) and of a proof that this stock has been held separately, disburses the dividend without deducting withholding tax. An exemption certificate can be granted upon application (using official application forms) with the German Federal Central Tax Office (*Bundeszentralamt für Steuern)* (at the above address).

With respect to distributions made to shareholders not tax resident in Germany, the withholding tax may be at least partially refunded in accordance with an applicable double taxation treaty Germany has entered into with the respective shareholder's country of residence if the shares neither form part of the assets of a permanent establishment or a fixed place of business in Germany, nor form part of business assets for which a permanent representative in Germany has been appointed. The withholding tax refund is generally granted by the German Federal Central Tax Office (at the above address) upon application in such a manner that the difference between the total amount withheld, including the solidarity surcharge, and the reduced withholding tax actually owed under the relevant double taxation treaty (generally 15.0%) is refunded by the German Federal Central Tax Office. A

refund is not required if the Federal Central Tax Office has, upon application on the officially prescribed form, issued an exemption certificate (*Freistellungsbescheinigung*) which documents that the prerequisites for the application of the reduced withholding tax rates have been met. Dividends covered by the exemption certificate of the shareholder are then only subject to the reduced withholding tax rates stipulated in the exemption certificate.

Forms for the reimbursement and the exemption from the withholding at source procedure are available at the German Federal Central Tax Office (at the above address or online at https://www.bzst.de).

If dividends are distributed to corporations subject to non-resident taxation in Germany, *i.e.*, corporations with no registered office or place of management in Germany and if the shares neither belong to the assets of a permanent establishment or fixed place of business in Germany nor are part of business assets for which a permanent representative in Germany has been appointed, two-fifths of the tax withheld at the source can generally be refunded even if not all of the prerequisites for a refund under the Parent-Subsidiary Directive or an applicable double taxation treaty are fulfilled. The relevant application forms are available at the German Federal Central Tax Office (at the above address).

The aforementioned possibilities for an exemption from or a refund of withholding tax depend on certain other conditions being met (particularly the fulfillment of so-called "substance requirements" – *Substanzerfordernisse*).

Pursuant to a special rule, the aforementioned withholding tax reliefs as well as the credit of withholding tax described in the section *19.2.2. "— Taxation of Dividends of Shareholders with a Tax Domicile in Germany*" below for shares held as non-business and as business assets will only be granted if the shareholder (i) has been the economic owner of the shares for a continuous period of at least 45 days during the period starting 45 days prior to the date when the dividend becomes due and ending 45 days after such date (the "**Minimum Holding Period**" (*Mindesthaltedauer*)), (ii) has been exposed (if taking into account claims of the shareholder from transactions reducing the risk of changes of the market value of the shares and corresponding claims of related parties of the shareholder) to at least 70.0% of the risk resulting from a decrease-in-value of the shares continuously during the Minimum Holding Period (the minimum change-in-value risk (*Mindestwertänderungsrisiko*)) and (iii) is not obliged to forward (*vergüten*) these dividends, directly or indirectly, in total or to more than 50.0% to another person.

In the event that a shareholder tax resident in Germany does not meet the aforementioned three requirements, three fifths of the withholding tax levied on the dividends (*i.e.,* 15.0% of the dividends) is not creditable, but may, upon application, be deducted when determining the shareholder's taxable income in an assessment procedure. Shareholders who do not meet the requirements but who have, nevertheless, not suffered a withholding tax deduction on the dividends (for example, due to the presentation of a non-assessment certificate) or have already obtained a refund of the taxes withheld, are obliged to notify their competent tax office thereof and to make the payment of an amount corresponding to the amount which would otherwise be withheld; pursuant to the law regarding tax incentives for electric mobility and the amendment of further tax regulations (*Gesetz zur weiteren steuerlichen Förderung der Elektromobilität und zur Änderung weiterer steuerlicher Vorschriften*) that came into force on December 18, 2019, this amount will be equal to 15.0% of the dividends from January 1, 2019 onwards. The special rule on the restriction of withholding tax credit does not apply to a shareholder if either (i) his or her amount of dividend income on shares (including shares of the Company) and certain profit participation rights (*Genussrechte*) does not exceed an amount of EUR 20,000.00 in a given tax assessment period or if (ii) he or she has been, upon actual

receipt of the dividend, the economic owner of the shares for a continuous period of at least one year, whereby shares of the shareholder acquired first are deemed to be sold first (first in – first out).

In the event that a shareholder not tax resident in Germany does not meet the aforementioned three requirements, a refund of the withholding tax pursuant to a double taxation treaty is not available. This restriction only applies if (i) the applicable double taxation treaty provides for a tax reduction leading to an applicable tax rate of less than 15.0%, (ii) the shareholder is not a corporation that directly holds at least a participation of 10.0% of the equity capital of the Company and is subject to tax on its income and profits in its state of residence without being exempt and (iii) the shareholder has not been, upon actual receipt of the dividend, the economic owner of the shares for a continuous period of at least one year, whereby shares of the shareholder acquired first are deemed to be sold first (first in – first out).

The Dividend Paying Agent which keeps or administrates the shares and pays or credits the capital income is required to create so-called "pots for offsetting losses" (*Verlustverrechnungstöpfe*) to allow for negative capital income to be set off against current and future positive capital income. A set off of negative capital income at one Dividend Paying Agent against positive capital income at another Dividend Paying Agent is only possible in the course of the income tax assessment at the level of the respective shareholder. In such case the relevant shareholder has to apply for a certificate confirming the amount of losses not offset with the Dividend Paying Agent where the pot for offsetting losses exists. The application is irrevocable and must reach the Dividend Paying Agent until December 15 of the respective year, as otherwise the losses will be carried forward by the respective Dividend Paying Agent to the following year.

Withholding tax will not be withheld by a Dividend Paying Agent if the shareholder provides such Dividend Paying Agent with an application for exemption (*Freistellungsauftrag*) to the extent such shareholder's capital income does not exceed the annual lump-sum deduction (*Sparer-Pauschbetrag*) of EUR 801.00 (EUR 1,602.00 for married couples and registered partners jointly assessed) as outlined on the application for exemption. Furthermore, no withholding tax will be levied if the shareholder provides the Dividend Paying Agent with a non-assessment certificate (*Nichtveranlagungsbescheinigung*) to be applied for with the competent tax office.

19.2.2. Taxation of Dividends of Shareholders with a Tax Domicile in Germany

This section applies to shareholders with a tax domicile in Germany (*i.e.*, persons whose residence, habitual abode, statutory seat, or place of effective management and control is located in Germany).

19.2.2.1. Shares Held as Non-Business Assets

Dividends distributed to shareholders with a tax domicile in Germany whose shares are held as non-business assets form part of their taxable capital investment income, which is subject to a special uniform income tax rate of 25.0% plus solidarity surcharge of 5.5% thereon (*i.e.*, 26.375% in total plus church tax, if applicable). The income tax owed for this dividend income is generally satisfied by the withholding tax withheld by the Dividend Paying Agent (flat-rate withholding tax (*Abgeltungsteuer*)). Income-related expenses cannot be deducted from the shareholder's capital investment income (including dividends), except for an annual lump-sum deduction (*Sparer-Pauschbetrag*) of EUR 801.00 (EUR 1,602.00 for married couples and registered partners jointly assessed). However, the shareholder may request that his capital investment income (including dividends) along with his other taxable income be subject to a progressive income tax rate (instead of the uniform tax rate for capital investment income) if this results in a lower tax burden. In this case, income-related expenses cannot be deducted from the capital investment income, except for the aforementioned annual lump-sum deduction.

If the withholding tax deduction does not satisfy (*abgelten*) the tax liability of the shareholder, the withholding tax will generally be credited against the progressive income tax and any excess amount will be refunded if the requirements of the special rule on the restriction of withholding tax credit (see above *19.2.1. "— Withholding Tax"*) are fulfilled.

Exceptions from the flat-rate withholding tax also apply upon application for shareholders who have a shareholding of at least 25.0% in the Company or and for shareholders who have a shareholding of at least 1.0% in the Company and are able to entrepreneurially influence the business activities of the Company through a professional work for the Company. In this situation, the tax treatment described below at *19.2.2.2.2. "— Shares Held as Business Assets — Sole Proprietors"*) applies.

For taxpayers, subject to church tax, such tax will be withheld by way of an automated procedure and remitted to the religious community levying the tax. Church tax withheld at source may not be deducted as a special expense (*Sonderausgabe*) in the course of the tax assessment, but the Dividend Paying Agent may reduce the standard withholding tax rate (including the solidarity surcharge of 26.375%) by the church tax to be withheld on the dividends. Where shareholders have lodged a timely written objection with the German Federal Central Tax Office (*Bundeszentralamt für Steuern* (at the above address)) (so-called "blocking notice" – *Sperrvermerk*) as regards the automated retrieval of data on their religious affiliation, church tax will not be automatically deducted. In this case, a shareholder subject to church tax is obliged to declare the dividends in his or her income tax return. The church tax on the dividends is then levied by way of a tax assessment.

Shareholders who are subject to German tax residents' taxation and hold their shares as non-business assets may be paid the dividends without deduction of withholding tax if certain prerequisites are met, in particular, if the shareholder has provided a non-assessment certificate (*Nichtveranlagungs-Bescheinigung*) or an exemption instruction (*Freistellungsauftrag*) and the exempt amount indicated therein has not yet been exhausted.

As an exemption, dividend payments that are funded from the Company's contribution account for tax purposes (*steuerliches Einlagekonto; § 27 KStG*) and are paid to shareholders with a tax domicile in Germany whose shares are held as non-business assets, do – contrary to the above – not form part of the shareholder's taxable income but reduce the acquisition costs for the underlying shares. This results in a higher capital gain in the event of the shares' disposal (see below at *19.3. "— Taxation of Capital Gains*"). However, this will not apply if (i) the shareholder or, in the event of a gratuitous transfer, its legal predecessor, or, if the shares have been gratuitously transferred several times in succession, one of his or her legal predecessors at any point during the five years preceding the (deemed, as the case may be,) disposal directly or indirectly held at least 1.0% of the share capital of the Company (a "**Qualified Holding**") and (ii) the dividend payment funded from the Company's contribution account for tax purposes exceeds the actual acquisition costs of the shares. In such a case of a Qualified Holding, a dividend payment funded from the Company's contribution account for tax purposes is deemed a sale of the shares and is taxable as a capital gain if and to the extent the dividend payment funded from the Company's contribution account for tax purposes exceeds the acquisition costs of the shares. In this case the taxation corresponds with the description in the section *19.3.1.1. "— Taxation of Capital Gains — Taxation of Capital Gains of Shareholders with a Tax Domicile in Germany — Shares Held as Non-Business Assets*" made with regard to shareholders maintaining a Qualified Holding.

19.2.2.2. Shares Held as Business Assets

Dividends from shares held as business assets of a shareholder with a tax domicile in Germany are not subject to the flat-rate withholding tax. However, dividends are generally subject to the withholding tax on capital investment income of 25.0% plus 5.5% solidarity surcharge thereon, resulting in an aggregate tax rate of 26.375%, plus church tax for individuals, if applicable. The

withholding tax (including the solidarity surcharge and church tax, if applicable) withheld and paid by the Dividend Paying Agent will generally be credited against the shareholder's income or corporate income tax liability (including the solidarity surcharge and church tax, if applicable) or refunded in the amount of any excess if the requirements of the special rule on the restriction of withholding tax credit (see above *19.2.1. "— Withholding Tax"*) are fulfilled. The taxation depends on whether the shareholder is a corporation, a sole proprietor or a partnership (co-entrepreneurship).

Dividend payments that are funded from the Company's contribution account for tax purposes (*steuerliches Einlagekonto; § 27 KStG*) and are paid to shareholders with a tax domicile in Germany whose shares are held as business assets, are generally fully tax-exempt in the hands of such shareholder but reduce the acquisition costs for the underlying shares. To the extent the dividend payments funded from the Company's contribution account for tax purposes exceed the actual acquisition costs of the shares, a taxable capital gain occurs. The taxation of such gain corresponds with the description in section *19.3.1.2. "— Taxation of Capital Gains — Taxation of Capital Gains of Shareholders with a Tax Domicile in Germany — Shares Held as Business Assets*" made with regard to shareholders whose shares are held as business assets.

19.2.2.2.1. Corporations

If the shareholder is a corporation with a tax domicile in Germany, the dividends are in general effectively 95.0% exempt from corporate income tax and the solidarity surcharge. 5.0% of the dividends are treated as non-deductible business expenses and are therefore subject to corporate income tax (plus the solidarity surcharge) at a total tax rate of 15.825%. Business expenses actually incurred in direct relation to the dividends may be deducted. However, dividends are not exempt from corporate income tax (including solidarity surcharge thereon), if the shareholder only holds a direct participation of less than 10.0% in the Company's registered share capital at the beginning of the calendar year ("**Portfolio Participation**" – *Streubesitzbeteiligung*). Participations of at least 10.0% acquired during a calendar year are deemed to have been acquired at the beginning of the calendar year. Participations which a shareholder holds through a partnership (including those that are co-entrepreneurships (*Mitunternehmerschaften*)) that is not an Opting Partnership (as defined below) are attributable to the shareholder only on a *pro rata* basis at the ratio of the interest share of the shareholder in the assets of the relevant partnership.

Dividends (after deducting business expenses economically related to the dividends) are subject to trade tax in the full amount, unless the shareholder held at least 15.0% of the Company's registered share capital at the beginning of the relevant tax assessment period. In the latter case, the dividends are not subject to trade tax; however, trade tax is levied on the amount considered to be a non-deductible business expense (amounting to 5.0% of the dividend). Trade tax depends on the municipal trade tax multiplier applied by the relevant municipal authority.

Special rules apply to dividends received by companies active in the financial and insurance sectors, as well as pension funds (see below *19.4. "— Special Treatment of Companies in the Financial and Insurance Sectors and Pension Funds*").

19.2.2.2.2. Sole Proprietors

If the shares are held as business assets by a sole proprietor with a tax domicile in Germany, only 60.0% of the dividends are subject to a progressive income tax (plus the solidarity surcharge) at a total tax rate of up to approximately 47.5%, known as the partial income method (*Teileinkünfteverfahren*). The partial income method does not apply with respect to church tax (if applicable). Only 60.0% of the business expenses economically related to the dividends are tax-deductible. If the shares belong to a domestic permanent establishment in Germany of a business operation of the shareholder, the dividend income (after deducting business expenses economically

related thereto) is not only subject to income tax but is also fully subject to trade tax, unless the shareholder held at least 15.0% of the Company's registered share capital at the beginning of the relevant tax assessment period. In this latter case, the net amount of dividends, *i.e.*, after deducting directly related expenses, is exempt from trade tax. As a rule, trade tax can be credited against the shareholder's personal income tax, either in full or in part, by means of a lump-sum tax credit method, depending on the level of the municipal trade tax multiplier and certain individual tax-relevant circumstances of the taxpayer.

19.2.2.2.3. Partnerships

If the shareholder is a partnership with a tax domicile in Germany, the income or corporate income tax, as the case may be, and the solidarity surcharge are not levied at the level of the partnership but at the level of the respective partner. The taxation for every partner depends on whether the partner is a corporation or an individual. If the partner is a corporation, the dividends contained in the profit share of the shareholder will be taxed in accordance with the principles applicable for corporations (see *19.2.2.2.1. "— Corporations*" above). If the partner is an individual, the taxation is in line with the principles described for sole proprietors (see *19.2.2.2.2. "— Sole Proprietors"* above). Upon application and subject to further conditions, an individual as a partner can have his personal income tax rate lowered for earnings not withdrawn from the partnership.

In addition, the dividends are generally subject to trade tax in the full amount at the level of a commercial or deemed commercial partnership if the shares are attributed to a German permanent establishment of the partnership. If a partner of the partnership is an individual, the portion of the trade tax paid by the partnership pertaining to his profit share will generally be credited, either in full or in part, against his personal income tax by means of a lump-sum method – depending on the level of the municipal trade tax multiplier and certain individual tax-relevant circumstances of the taxpayer. If the partnership held at least 15% of the Company's registered share capital at the beginning of the relevant tax assessment period, the dividends (after deduction of business expenses economically related thereto) should generally not be subject to trade tax. In this case, trade tax should, however, be levied on 5% of the dividends to the extent they are attributable to the profit share of a corporate partner to whom at least 10% of the shares in the Company are attributable on a look-through basis, since this portion of the dividends should be deemed to be non-deductible business expenses. The remaining portion of the dividend income attributable to partners other than such specific corporate partners (which includes individual partners and should, according to a literal reading of the law, also include corporate partners to whom, on a look-through basis, only Portfolio Participations are attributable) should not be subject to trade tax. Due to a lack of case law and administrative guidance, the exact application of the rules for the taxation of dividends from Portfolio Participations (see *19.2.2.2.1. "— Corporations*" above) is, however, unclear. Shareholders are strongly recommended to consult their tax advisers.

With effect from any fiscal year beginning after December 31, 2021, partnerships may elect to be treated as a corporation for purposes of German income taxation. If the shareholder is a partnership that has validly exercised such option right ("**Opting Partnership**"), the dividends are subject to corporate income tax and trade tax generally according to the same rules that apply to corporations (see *19.2.2.2.1. "— Corporations"* above).

19.2.3. Taxation of Dividends of Shareholders with a Non-German Tax Domicile

Shareholders without a tax domicile in Germany, whose shares are attributable to a German permanent establishment or fixed place of business or are part of business assets for which a permanent representative in Germany has been appointed, are liable for tax in Germany on their dividend income. In this respect the provisions outlined above for shareholders with a tax domicile in Germany whose shares are held as business assets apply accordingly (see *19.2.2.2. "— Shares*

Held as Business Assets"). The withholding tax (including the solidarity surcharge) withheld and passed on will generally be credited against the income or corporate income tax liability or refunded in the amount of any excess if the requirements of the special rule on the restriction of withholding tax credit (see above *19.2.1. "— Withholding Tax"*) are fulfilled.

In all other cases, any tax liability in Germany for dividends received by shareholders resident outside of Germany will be discharged through the withholding of the withholding tax by the Dividend Paying Agent. A refund or exemption is granted only as discussed under *19.2.1. "— Withholding Tax"* above.

Dividend payments that are funded from the Company's contribution account for tax purposes (*steuerliches Einlagekonto; § 27 KStG*) are generally not subject to German taxation.

19.3. Taxation of Capital Gains

19.3.1. Taxation of Capital Gains of Shareholders with a Tax Domicile in Germany

This section applies to shareholders with a tax domicile in Germany (*i.e.*, persons whose residence, habitual abode, statutory seat, or place of effective management and control is located in Germany).

19.3.1.1. Shares Held as Non-Business Assets

Gains on the disposal of shares acquired after December 31, 2008 by a shareholder with a tax domicile in Germany and held as non-business assets are generally – regardless of the holding period – subject to a uniform tax rate on capital investment income in Germany (25.0% plus the solidarity surcharge of 5.5% thereon, *i.e.*, 26.375% in total plus any church tax, if applicable).

The taxable capital gain is equal to the difference between (a) the proceeds of the disposal and (b) the acquisition costs of the shares plus the expenses related directly and materially to the disposal. Dividend payments that are funded from the Company's contribution account for tax purposes (*steuerliches Einlagekonto; § 27 KStG*) reduce the original acquisition costs; if dividend payments that are funded from the Company's contribution account for tax purposes exceed the acquisition costs, negative acquisition costs – which can increase a capital gain – can arise in case of shareholders, whose shares are held as non-business assets and do not qualify as a Qualified Holding.

Only an annual lump-sum deduction of EUR 801.00 (EUR 1,602.00 for married couples and registered partners jointly assessed) may be deducted from the entire capital investments income. It is generally not possible to deduct income-related expenses in connection with capital gains, except for the expenses directly related in substance to the disposal which can be deducted when calculating the capital gains. Losses from the disposal of shares may only be offset against profits from capital investments arising from the disposal of the Shares or other shares in stock corporations during the same assessment period or in future assessment periods. Such losses cannot be offset against other income from capital assets. However, recently the German Federal Tax Court (*Bundesfinanzhof*) has been of the opinion that such legal regulation limiting of the loss offset opportunities with regard to losses from the disposal of shares is unconstitutional and therefore has referred such legal question to the German Federal Constitutional Court (*Bundesverfassungsgericht*) (decision dated June 4, 2021 (VIII R 11/18)). It therefore remains to be open if such legal regulations will still be applicable in the future.

Furthermore, in case of a derecognition or transfer of worthless shares (or other capital assets), the utilization of such loss is further restricted and can only be offset for losses up to the amount of EUR 20,000.00 per calendar year.

If the shares are held in custody or administered by a domestic credit or financial services institution, domestic securities trading company or a domestic securities trading bank, including domestic branches of foreign credit institutions or financial service institutions, or if such an office executes the disposal of the shares and pays out or credits the capital gains (each a "**Domestic Paying Agent**"), the tax on the capital gains will generally be satisfied by the Domestic Paying Agent withholding the withholding tax on investment income in the amount of 26.375% (including the solidarity surcharge) on the capital gain and transferring it to the tax authority for the account of the seller. If the shares were held in custody or administered by the respective Domestic Paying Agent continuously after acquisition, the amount of tax withheld is generally based on the difference between the proceeds from the sale, after deducting expenses directly related to the sale, and the amount paid to acquire the shares. However, the withholding tax rate of 25.0% plus the 5.5% solidarity surcharge thereon and any church tax (if applicable), will be applied to 30.0% of the gross sales proceeds if the shares were not administered by the same custodian bank since acquisition and the original cost of the shares cannot be verified or such verification is not admissible. In this case, the shareholder is entitled to, and in case the actual gain is higher than 30% of the gross proceeds must, verify the original costs of the shares in his or her annual income tax return.

The church tax deduction for capital gains is performed by way of standardized tax withholding procedure by the Domestic Paying Agent withholding such tax. The principles outlined above for church tax on dividend income (see *19.2.2.1. "— Taxation of Dividends — Taxation of Dividends of Shareholders with a Tax Domicile in Germany — Shares Held as Non-Business Assets*" above) apply accordingly.

The shareholder can apply for his or her total capital investment income, together with his or her other taxable income, to be subject to a progressive income tax rate as opposed to the uniform tax rate on investment income, if this results in a lower tax liability. In this case, the withholding tax is credited against the progressive income tax and any resulting excess amount will be refunded. Limitations on offsetting losses are applicable. Further, income-related expenses are non-deductible, except for the annual lump-sum deduction.

Shareholders who are subject to German residents' taxation and hold their shares as non-business assets may realize capital gains without deduction of tax on capital investment income and solidarity surcharge if certain prerequisites are met, particularly if the shareholder has provided a non-assessment certificate (*Nichtveranlagungs-Bescheinigung*) or an exemption instruction (*Freistellungsauftrag*) and the exempt amount indicated therein has not yet been exhausted.

If the withholding tax or, if applicable, the church tax on capital gains is not withheld by a Domestic Paying Agent, the shareholder is required to declare the capital gains in his or her income tax return. The income tax and any applicable church tax on the capital gains will then be collected by way of assessment.

In case of a Qualified Holding, the capital gain deriving from the disposal of the shares is not subject to the flat-rate withholding tax, but to the progressive income tax regime. In this case the partial income method applies to gains on the disposal of shares, which means that only 60.0% of the capital gains are subject to tax and only 60.0% of the losses on the disposal and expenses economically related thereto are tax deductible. Even though withholding tax is withheld by a Domestic Paying Agent in the case of a Qualified Holding, this does not satisfy the tax liability of the shareholder. Consequently, a shareholder must declare his or her capital gains in his or her income tax returns. The withholding tax (including the solidarity surcharge and church tax, if applicable) withheld and paid will generally be credited against the shareholder's income tax liability on his or her tax assessment (including the solidarity surcharge and any church tax if applicable) or refunded in the amount of any excess.

19.3.1.2. Shares Held as Business Assets

Gains on the sale of shares held as business assets of a shareholder with a tax domicile in Germany are not subject to a uniform withholding tax. Withholding tax may only be withheld if the shares are kept with a Domestic Paying Agent. Subject to certain prerequisites, the tax on capital investment income withheld and remitted to the tax authorities will be imputed towards the shareholder's income tax liability and any excess amount paid will be refunded. Subject to certain requirements, however, the Domestic Paying Agent may refrain from deducting tax on capital investment income if (i) the shareholder is a corporation subject to German residents taxation, an association of individuals or an estate or (ii) the shares form part of the business assets of a business operation in Germany and the shareholders declare such to the Domestic Paying Agent in the officially prescribed form. Should the Domestic Paying Agent nonetheless have withheld tax on capital investment income, the tax withheld and remitted to the tax authorities (including solidarity surcharge, and church tax, if applicable) will generally be credited against the shareholder's personal income tax or corporate income tax liability and any excess amount paid will be refunded.

The taxation of the capital gains depends on whether the shareholder is a corporation, a sole proprietor or a partnership (co-entrepreneurship). Dividend payments that are funded from the Company's contribution account for tax purposes (*steuerliches Einlagekonto; § 27 KStG*) reduce the original acquisition costs. In the event of disposal, a higher taxable capital gain can arise therefrom. If the dividend payments exceed the shares' book value for tax purposes, a taxable capital gain can arise.

19.3.1.2.1. Corporations

If the shareholder is a corporation with a tax domicile in Germany, the gains on the disposal of shares are, in general, effectively 95.0% exempt from corporate income tax (including the solidarity surcharge) and trade tax, regardless of the size of the participation and the holding period. 5.0% of the gains are treated as non-deductible business expenses and are therefore subject to corporate income tax (plus the solidarity surcharge) at a tax rate amounting to 15.825% and trade tax (depending on the municipal trade tax multiplier applied by the respective municipal authority). As a rule, losses on disposals and other profit reductions in connection with shares (for example, from a write down) cannot be deducted as business expenses.

Special rules apply to capital gains realized by companies active in the financial and insurance sectors, as well as pension funds (see below *19.4. "— Special Treatment of Companies in the Financial and Insurance Sectors and Pension Funds"*).

19.3.1.2.2. Sole Proprietors

If the shares are held as business assets by a sole proprietor with a tax domicile in Germany, only 60.0% of the gains on the disposal of the shares are subject to a progressive income tax (plus the solidarity surcharge) at a total tax rate of up to approximately 47.5% (partial-income method). Only 60.0% of the losses on the disposal and expenses economically related thereto are tax deductible. The partial income method does not apply with respect to church tax (if applicable). If the shares belong to a German permanent establishment of a business operation of the sole proprietor, 60.0% of the gains of the disposal of the shares are, in addition, subject to trade tax.

Trade tax can be credited towards the shareholder's personal income tax, either in full or in part, by means of a lump-sum tax credit method – depending on the level of the municipal trade tax multiplier and certain individual tax-relevant circumstances of the taxpayer.

19.3.1.2.3. Partnerships

If the shareholder is a partnership with a tax domicile in Germany, the income or corporate income tax is not levied at the level of the partnership but at the level of the respective partners. The taxation depends on whether the partner is a corporation or an individual. If the partner is a corporation, the gains on the disposal of the shares as contained in the profit share of the partner will be taxed in accordance with the principles applicable for corporations (see *19.3.1.2.1. "— Corporations"* above). For capital gains in the profit share of a partner that is an individual, the principles outlined above for sole proprietors apply accordingly (partial-income method, see above under *19.3.1.2.2. "— Sole Proprietors*"). Upon application and subject to further conditions, an individual as a partner can obtain a reduction of his or her personal income tax rate for earnings not withdrawn from the partnership.

In addition, gains on the disposal of shares are subject to trade tax at the level of a commercial or deemed commercial partnership, if the shares are attributed to a domestic permanent establishment of a business operation of the partnership: Generally, 60.0% of the gain as far as the shares are attributable to the profit share of an individual as the partner of the partnership, and, currently, 5.0% as far as the shares are attributable to the profit share of a corporation as the partner of the partnership. Losses on disposals and other profit reductions in connection with the shares are currently not considered for the purposes of trade tax if they are attributable to the profit share of a corporation and are taken into account at 60.0% in the context of general limitations if they are attributable to the profit share of an individual.

If the partner of the partnership is an individual, the portion of the trade tax paid by the partnership attributable to his or her profit share will generally be credited, either in full or in part, against his or her personal income tax by means of a lump-sum method – depending on the level of the municipal trade tax multiplier and certain individual tax-relevant circumstances of the taxpayer.

If the shareholder is an Opting Partnership, any gain on the disposal of shares are subject to corporate income tax and trade tax generally according to the same rules that apply to corporations (see *19.3.1.2.1. "— Corporations"* above). If the Opting Partnership has, upon the election for the treatment as a corporation for German income tax purposes, applied for a tax-neutral roll-over of the book value of the shares, the disposal of the shares within a period of seven years after the election took effect will generally result in a retroactive taxation of the hidden reserves in the shares at that time.

19.3.2. Taxation of Capital Gains of Shareholders with a Non-German Tax Domicile

Capital gains derived from the disposal of shares by shareholders with no tax domicile in Germany are only subject to German tax if the selling shareholder has a Qualified Holding in the Company or the shares belong to a domestic permanent establishment or fixed place of business or are part of business assets for which a permanent representative in Germany has been appointed.

Pursuant to a decision of the German Federal Tax Court (*Bundesfinanzhof*) dated May 31, 2017 (Federal Tax Gazette (*Bundessteuerblatt*), part II of 2018, p. 144), in case of a Qualified Holding, the capital gain on the disposal of shares is not subject to German taxation if the shareholder is a corporation which is not tax resident in Germany and neither maintains a permanent establishment nor has appointed a permanent representative in Germany.

If the shareholder is a private individual, only 60.0% of the gains on the disposal of the shares are subject to progressive income tax plus the solidarity surcharge thereon and church tax, if applicable. However, most double taxation treaties provide for a partial or full relief from German taxation and assign the right of taxation to the shareholder's country of residence. Where a Domestic Paying Agent is involved, withholding tax on capital gains is generally levied at a rate of 25.0% (plus 5.5%

solidarity surcharge thereon, resulting in an aggregate withholding tax rate of 26.375%). However, if (i) the shares are not held through a permanent establishment or fixed place of business or as business assets for which a permanent representative is appointed in Germany and (ii) a Domestic Paying Agent is involved, then, pursuant to a tax decree issued by the German Federal Ministry of Finance (*Bundesministerium der Finanzen*) on January 18, 2016, the Domestic Paying Agent will in general not be required to withhold the tax on capital investment income (plus solidarity surcharge thereon). In the case of a Qualified Holding, the capital gains must be declared in a tax return and will be taxed via an assessment procedure if no exemption under a double taxation treaty or under domestic law applies.

With regard to gains or losses on the disposal of shares belonging to a domestic permanent establishment or fixed place of business, or which are part of business assets for which a permanent representative in Germany has been appointed, the above-mentioned provisions pertaining to shareholders with a tax domicile in Germany whose shares are business assets apply accordingly (see *19.3.1.2. "—Taxation of Capital Gains of Shareholders with a Tax Domicile in Germany — Shares Held as Business Assets"*). The Domestic Paying Agent can refrain from deducting the withholding tax if the shareholder declares to the Domestic Paying Agent on the officially prescribed form that the shares form part of domestic business assets and certain other requirements are met.

19.4. Special Treatment of Companies in the Financial and Insurance Sectors and Pension Funds

If credit institutions (*Kreditinstitute*) or financial services institutions (*Finanzdienstleistungsinstitute*) hold or sell shares that are allocable to their trading portfolio (*Handelsbestand*) pursuant to Section 340e para. 3 of the German Corporate Code (*Handelsgesetzbuch*), they will neither be able to benefit from the partial income method nor be entitled to the effective 95.0% exemption from corporate income tax plus the solidarity surcharge and any applicable trade tax. Thus, dividend income and capital gains are fully taxable. The same applies to shares acquired by financial institutions in the meaning of the German Banking Act (*Kreditwesengesetz*) held in the majority by credit institutions or financial services institutions and where the shares are to be allocated to the current assets (*Umlaufvermögen*) as of the date of acquisition. The preceding sentence applies accordingly for shares held in a permanent establishment in Germany by financial institutions, financial service institutions and financial institutions tax resident in another EU Member State or in other signatory states of the Treaty on the EEA.

Likewise, the tax exemption described earlier afforded to corporations for dividend income and capital gains from the sale of shares does not apply to shares that qualify as a capital investment in the case of life insurance and health insurance companies, or those which are held by pension funds.

However, an exemption to the foregoing, and thus a 95.0% effective tax exemption, applies to dividends obtained by the aforementioned companies, to which the Parent-Subsidiary Directive applies. In addition, applicable double taxation treaties might provide further relief from German tax, subject to certain prerequisites, *e.g.*, substance requirements and holding periods, being met.

19.5. Inheritance and Gift Tax

The transfer of shares to another person by way of inheritance or gift is generally subject to German inheritance or gift tax if:

(i) the place of residence, habitual abode, place of management or registered office of the decedent, the donor, the heir, the donee or another acquirer is, at the time of the asset transfer, in Germany, or such person, as a German national, has prior to the transfer not spent more than generally five consecutive years outside of Germany without maintaining a place of residence in Germany;

(ii) the decedent's or donor's shares belonged to business assets for which there had been a permanent establishment in Germany or a permanent representative had been appointed; or

(iii) the decedent or the donor, at the time of the succession or gift, held a direct or indirect interest of at least 10.0% of the Company's share capital either alone or jointly with other related parties.

The small number of double taxation treaties in respect of inheritance and gift tax which Germany has concluded to date usually provide for German inheritance or gift tax only to be levied in the cases under (i) and, subject to certain restrictions, in the cases under (ii). Special provisions apply to certain German nationals living outside of Germany and to former German nationals.

19.6. Abolishment of Solidarity Surcharge

On December 13, 2019, the law regarding a significant reduction of the solidarity surcharge (*Gesetz zur Rückführung des Solidaritätszuschlags 1995*) came into force. Even though, this new law has no impact on the solidarity surcharge levied in addition to the withholding tax, it can affect the solidarity surcharge levied on the income tax liability which the withholding tax is credited against, as the case may be. According to this new law the threshold as of which solidarity surcharge is levied will be significantly increased to an individual income tax-threshold of EUR 16,956 (EUR 33,912 for jointly assessed German Tax Resident Investors), so that the solidarity surcharge shall be abolished in full for approximately 90% of the German taxpayers and partly for a further 6.5% of German taxpayers. The new rules already apply since 2021. Shareholders are advised to monitor further future developments.

19.7. Other Taxes

No German capital transfer taxes, value-added-tax, stamp duties or similar taxes are currently levied on the purchase or disposal or other forms of transfer of the shares. However, an entrepreneur may opt to subject disposals of shares, which are in principle exempt from value-added tax, to value-added-tax if the sale is made to another entrepreneur for the entrepreneur's business. Wealth tax is currently not levied in Germany.

On February 14, 2013, the EU Commission adopted a proposal for a Council Directive (the "**Draft Directive**") on a common financial transaction tax ("**FTT**") to be implemented in Austria, Belgium, France, Germany, Greece, Italy, Portugal, Spain, Slovakia, and Slovenia (the "**Participating Member States**"). Estonia has stated in 2015 that it will not participate in implementing the proposed FTT.

The Draft Directive has a very broad scope and could, if introduced, apply to certain dealings in the shares (including secondary market transactions) in certain circumstances. The Draft Directive focused on levying an FTT on financial transactions (as defined in the Draft Directive), including the purchase, sale and exchange of financial instruments. Under the Draft Directive, the rate of the FTT would not be lower than 0.1% (0.01% for derivatives), generally based on the amount of the paid or owed consideration or in case of derivatives, the notional amount referred to in the derivatives

contract at the time of the financial transaction. The issuance and subscription of shares should, however, be exempt.

Since the date of the publication of the Draft Directive, discussions have taken place between the Participating Member States. According to a statement of the German Federal Ministry of Finance (*Bundesministerium der Finanzen*) dated May 25, 2020, the work on the legal framework for the FTT is well advanced and should have been finalized in the second half of the calendar year 2020. However, the legal framework for the FTT has not been finalized yet. The FTT is expected to be modelled on the existing French FTT legislation. Consequently, the FTT is expected to apply to the acquisition of shares in domestic companies with a market capitalization of more than EUR 1 billion and at a rate of 0.2%.

Nevertheless, the FTT remains subject to negotiation between the Participating Member States and was (and most probably will be) the subject of legal challenge. It may still be altered prior to its adoption. Moreover, once any directive has been adopted, it will need to be implemented into the respective domestic laws of the participating member states, and the domestic provisions implementing the directive might deviate from the directive itself. Finally, additional EU member states may decide to participate in or to dismiss the implementation.

Prospective holders of the shares are advised to monitor future developments closely and should consult their own tax advisers in relation to the consequences of the FTT.

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Audited Consolidated Financial Statements of Epigenomics AG Prepared in Accordance with IFRS as of and for the financial year ended December 31, 2020

Consolidated Statement of Comprehensive Income (Consolidated Statement of Profit or Loss and Other Comprehensive Income)

for the period from January 1 to December 31

EUR thousand	Note	2020	2019
Revenue	**1**	**842**	**1,125**
Cost of sales	3	-145	-253
Gross profit		**697**	**872**
Gross margin (in %)		*82.8*	*77.5*
Other income	2	1,507	2,488
Research and development costs	3	-3,659	-7,340
Selling, general and administrative costs	3	-7,301	-8,935
Other expenses	3; 6	-2,871	-1,758
Operating result/earnings before interest and taxes (EBIT)	**7**	**-11,627**	**-14,673**
Interest income	8	21	172
Interest expenses	8	-55	-63
Other financial result	8	-2	-2
Net loss for the year before taxes on income		**-11,663**	**-14,566**
Taxes on income	9	-23	-2,454
Net loss for the year		**-11,686**	**-17,020**
Items that may be reclassified to profit or loss:			
Exchange differences on translation of foreign operations	23	1,528	-147
Changes in fair value of financial instruments measured at fair value through other comprehensive income	23	81	228
Other comprehensive income for the year		**1,609**	**81**
Total comprehensive income for the year		**-10,077**	**-16,939**
Earnings per share (basic and diluted, in EUR)[1]	***10***	***-2.02***	***-3.65***

[1] *For reasons of comparability, the figure for 2019 was adjusted to reflect the reverse stock split carried out in December 2020.*

Consolidated Balance Sheet

as of December 31

EUR thousand

ASSETS	Note	Dec. 31, 2020	Dec. 31, 2019
Non-current assets			
Intangible assets	11	144	333
Property, plant and equipment	12	1,184	1,533
Deferred taxes	14	0	0
Total non-current assets		**1,328**	**1,866**
Current assets			
Inventories	15	122	313
Trade receivables	16	251	89
Marketable securities	17	961	880
Cash and cash equivalents	18	3,566	10,155
Other current assets	19	569	686
Total current assets		**5,469**	**12,123**
Total assets		**6,797**	**13,989**

EQUITY AND LIABILITIES	Note	Dec. 31, 2020	Dec. 31, 2019
Equity			
Subscribed capital	20	5,891	43,528
Capital reserve	21	87,419	69,251
Retained earnings	22	-79,046	-85,807
Net loss for the year		-11,686	-17,020
Other comprehensive income	23	1,286	-323
Total equity		**3,864**	**9,629**
Non-current liabilities			
Lease liabilities		460	697
Provisions	25	36	44
Total non-current liabilities		**496**	**741**
Current liabilities			
Trade payables	26	629	1,430
Lease liabilities		223	216
Deferred income		80	5
Other liabilities	27	627	1,368
Provisions	25	878	600
Total current liabilities		**2,437**	**3,619**
Total equity and liabilities		**6,797**	**13,989**

Consolidated Statement of Cash Flows

for the period from January 1 to December 31

EUR thousand	Note	2020	2019
Cash and cash equivalents at the beginning of the year		**10,155**	**16,487**
Operating activities	-		
Net loss for the year		**-11,686**	**-17,020**
Adjustments for:			
Stock option expenses	4	631	873
Depreciation of property, plant and equipment	5, 11	342	319
Amortization of intangible assets	5, 12	193	194
Loss from the disposal of non-current assets	6	0	1
Foreign currency exchange results		0	25
Financial income	8	-21	-172
Financial expenses	8	56	65
Taxes	9	23	2,454
Operating result before changes in operating assets and liabilities		**-10,462**	**-13,261**
Inventories	15	185	45
Trade receivables	16	-159	84
Other assets	19	108	-77
Non-current and current provisions	25	286	-364
Trade payables and other liabilities	26, 27	420	118
Deferred income		74	-17
Tax paid		-23	-34
Cash flow from operating activities	**30**	**-9,571**	**-13,506**
Investing activities			
Payments to acquire intangible assets		-11	-47
Payments to acquire property, plant and equipment		-10	-75
Interest received	8	24	169
Cash flow from investing activities	**31**	**3**	**47**
Financing activities			
Proceeds from the issue of new shares	20, 21	3,998	8,332
Payments for the issue of new shares	21	-725	-983
Payments for capital reduction		-23	0
Payments for leases		-268	-229
Cash flow from financing activities	**32**	**2,982**	**7,120**
Net cash flow		**-6,586**	**-6,339**
Currency translation effects		-3	7
Cash and cash equivalents at the end of the year		**3,566**	**10,155**

As of the balance sheet date, EUR 81 thousand of cash and cash equivalents included restricted cash.

Consolidated Statement of Changes in Equity

as of December 31

EUR thousand	Note	Subscribed capital	Capital reserve	Retained earnings	Net loss for the year	Other comprehensive income	Group equity
December. 31, 2018		**36,022**	**68,802**	**-73,115**	**-12,692**	**-404**	**18,613**
Total comprehensive income 2019	23	0	0	0	-17,020	81	-16,939
Transfer of net loss for the year 2018 to retained earnings		0	0	-12,692	12,692	0	0
Capital increase with subscription rights	20	7,506	0	0	0	0	7,506
Premium from the capital increase with subscription rights	20, 21	0	826	0	0	0	826
Costs for the creation of new shares	21	0	-1,250	0	0	0	-1,250
Stock option expenses	4, 21	0	873	0	0	0	873
December 31, 2019		**43,528**	**69,251**	**-85,807**	**-17,020**	**-323**	**9,629**
Total comprehensive income 2020	23	0	0	0	-11,686	1,609	-10,077
Transfer of net loss for the year 2019 to retained earnings		0	0	-17,020	17,020	0	0
Capital increase with subscription rights	20	3,602	0	0	0	0	3,602
Premium from the capital increase with subscription rights	20, 21	0	397	0	0	0	397
Costs for the creation of new shares	21	0	-295	0	0	0	-295
Reverse stock split (8:1)	19, 21	-41,239	17,458	23,781	0	0	0
Costs for the reverse stock split		0	-23	0	0	0	-23
Stock option expenses	4, 21	0	631	0	0	0	631
December 31, 2020		**5,891**	**87,419**	**-79,046**	**-11,686**	**1,286**	**3,864**

Notes to the Consolidated Financial Statements 2020

Basic Information, Principles and Methods

Description of Business Activity

Epigenomics ("Epigenomics", the "Group" or the "Company") was founded as a limited liability company under German law (*Gesellschaft mit beschränkter Haftung* – GmbH) in 1998 and has its registered office in Berlin, Germany. In 2000, the Company was converted into a stock corporation under German law (*Aktiengesellschaft* – AG) and entered into the commercial register (*Handelsregister*) of Charlottenburg Local Court under HRB 75861. It has been listed in the Prime Standard segment of the Frankfurt Stock Exchange since July 19, 2004 (ticker symbol: ECX).

In accordance with its Articles of Association, the object of the Company is the development and marketing of procedures and devices for the production in quantity of particular epigenetic parameters such as DNA methylation patterns as well as the information technology bases necessary for their procurement and evaluation. Epigenomics AG is a molecular diagnostics company developing and commercializing a pipeline of proprietary products for screening, early detection and diagnosis of cancer. The Company's products enable doctors to diagnose cancer earlier and more accurately, leading to improved outcomes for patients.

General Principles

The consolidated financial statements of Epigenomics AG have been prepared in accordance with Section 315e of the German Commercial Code (*Handelsgesetzbuch* – HGB) and in application of the International Financial Reporting Standards (IFRSs) of the International Accounting Standards Board (IASB), London, in effect as of the December 31, 2020 balance sheet date, as adopted by the European Union (EU).

The Company has incurred accounting losses (after the simplified reduction of capital) of EUR 90,732 thousand since being founded. The Company generated a net loss of EUR 11,686 thousand for 2020 (2019: EUR 17,020 thousand). The "going concern" principle in accordance with IAS 1.25 *Presentation of Financial Statements* was applied. The Company had liquid funds (cash, cash equivalents and marketable securities) of EUR 4.5 million as of the end of 2020.

After the end of the reporting period, in January 2021, the Company successfully placed a EUR 5.5 million mandatory convertible bond with its shareholders. After receiving the gross proceeds, the Company's liquidity amounted to well in excess of EUR 9 million as of the beginning of February 2021. The first cost-cutting measures were also introduced at that time. According to internal projections, the Company's continued existence as a going concern is secured beyond the beginning of 2022, although it must subsequently be considered at risk, at the latest by the end of the first quarter of 2022 (material uncertainty), unless the negative coverage decision issued by the U.S. Centers for Medicare and Medicaid Services (CMS) in January 2021 can be successfully appealed or rescinded in the coming months or further capital measures are successfully implemented. The Company is currently evaluating its legal options. However, the chances of this succeeding must be regarded as slim at best, and as such various strategic alternatives are also being examined to secure the Company's continued existence. Building on its expertise in blood testing and DNA methylation biomarkers, Epigenomics AG has already developed and validated a new test for CRC screening with clinical performance that meets the new coverage criteria laid down by CMS. Based on our experience in recent years and given the considerable market potential of this new test, we are confident being able to find one or more financially solid partners in 2021 who share our opinion and are prepared to make sufficient capital available to leverage its potential.

The Consolidated Statement of Comprehensive Income (Consolidated Statement of Profit or Loss and Other Comprehensive Income) has been prepared using the cost of sales method.

Reporting Period, Reporting Currency, and Rounding

The reporting period (comparative period) as defined in these consolidated financial statements is the period from January 1 to December 31, 2020 (2019). The reporting currency is the euro (EUR). Many figures are rounded to the nearest thousand euros, which may give rise to rounding differences in the figures presented in these notes.

Scope of Consolidation

The consolidated Group consists of Epigenomics AG as the parent company (registered office: Geneststrasse 5, 10829 Berlin, Germany) and Epigenomics, Inc., as its sole subsidiary during the reporting period. The subsidiary is registered in the U.S. state of Washington and since the reporting year has based its operations out of San Diego (11055 Flintkote Ave, Suite A, San Diego, CA 92121). Epigenomics AG held 100% of the share capital and the voting rights of Epigenomics, Inc. between January 1, 2020 and December 31, 2020.

For the reporting year and the previous year, the two companies each prepared separate financial statements which were either audited or reviewed, independent of their inclusion in the consolidated financial statements.

Principles of Consolidation

In acquisition accounting, the carrying amount of the investment is offset against the share of equity of the subsidiary attributable to the parent as at the date of acquisition. Any resulting difference is added to the assets and liabilities in the amount in which their market value deviates from their carrying amount at the time of the initial consolidation. Any amount in excess is recognized as goodwill.

All intercompany transactions and interim results, income and expenses, profits and losses, receivables and payables are eliminated in full on consolidation.

Application of New and Revised IFRSs and Interpretations and Effects on the Company's Consolidated Financial Statements for Fiscal Year 2020

In the reporting year, the Group for the first time applied the following new and amended IFRSs and Interpretations issued by the IASB and endorsed by the EU that are effective for accounting periods beginning on or after January 1, 2020. Generally, the new standards and amendments mentioned below require prospective application.

Mandatory application for fiscal years beginning on or after January 1, 2020:

Amendments to IFRS 3 *Definition of a Business* *(endorsed by the EU on April 21, 2020)*

The Amendments to IFRS 3 are intended to resolve the problems that arise when an entity determines whether it has acquired a business or a group of assets. Such problems may arise due to the fact that the accounting requirements for goodwill, acquisition costs and deferred taxes differ on the acquisition of a business and on the acquisition of a group of assets.

Applying the Amendments to IFRS 3 did not have any effect on the Company's financial statements in fiscal year 2020. Nor are any effects currently expected in future fiscal years.

Amendments to IAS 1 and IAS 8 *Definition of Material* *(endorsed by the EU on November 29, 2019)*

The Amendments to IAS 1 and IAS 8 clarify the definition of "material" and align the definition used in the Conceptual Framework and the standards themselves.

Applying the Amendments to IAS 1 and IAS 8 did not have any effect on the Company's financial statements in fiscal year 2020. Nor are any effects currently expected in future fiscal years.

Amendments to IFRS 9, IAS 39 and IFRS 7 *Interest Rate Benchmark Reform* *(endorsed by the EU on January 15, 2020)*

The amendments to IFRS 9, IAS 39 and IFRS 7 were necessitated by capital market developments that have brought into question the long-term viability of the established interest reference rates currently in use (e.g., LIBOR). Firstly, they modify specific hedge accounting requirements so that entities apply those hedge accounting requirements assuming that the interest rate benchmark on which the hedged cash flows and cash flows from the hedging instrument are based will not be altered as a result of interest rate benchmark reform. Secondly, the amendments will be mandatory for all hedging relationships that are affected by the interest rate benchmark reform. In addition, they require specific disclosures about the extent to which entities' hedging relationships are affected by the amendments.

Applying the Amendments to IFRS 9, IAS 39 and IFRS 7 did not have any effect on the Company's financial statements in fiscal year 2020. Nor are any effects currently expected in future fiscal years.

Revisions to Conceptual Framework for Financial Reporting in accordance with IFRSs *(endorsed by the EU on November 29, 2019)*

The new Conceptual Framework includes revised definitions of an asset and a liability as well as new guidance on measurement and derecognition, presentation and disclosure. These revisions result in amendments to multiple standards and interpretations that refer to the Conceptual Framework.

Applying the revised Conceptual Framework for Financial Reporting in accordance with IFRSs did not have any effect on the Company's financial statements in fiscal year 2020. Nor are any effects currently expected in future fiscal years.

Amendments to IFRS 16 *Covid-19-Related Rent Concessions* *(endorsed by the EU on October 9, 2020)*

The practical expedient proposed at short notice due to the COVID-19 pandemic provides lessees with an exemption in calendar year 2020 from assessing whether a COVID-19-related rent concession is a lease modification, subject to certain conditions. This enables lessees to account for such rent concessions as if there were no lease modification, in other words without applying the rules on lease modifications.

Applying the Amendments to IFRS 16 did not have any effect on the Company's financial statements in fiscal year 2020 since the Company has not taken advantage of any rent concessions.

Mandatory application for fiscal years beginning on or after January 1, 2021:

Amendments to IFRS 4 *Insurance Contracts* *(endorsed by the EU on December 16, 2020)*

Concurrent to the IASB's publication of its final amendments to IFRS 17 on the accounting treatment of insurance contracts, an associated amendment was made to IFRS 4 that extended the existing option to defer initial application of IFRS 9 until the new effective date of IFRS 17.

The Company does not expect that the application of the Amendments to IFRS 4 will have any effect on its financial statements for fiscal years from 2021 onward.

Amendments to IFRS 9, IAS 39, IFRS 7 and IFRS 16 *Interest Rate Benchmark Reform – Phase 2* *(endorsed by the EU on January 13, 2021)*

The further planned amendments to IFRS 9, IAS 39, IFRS 7 and IFRS 16 cover practical expedients in connection with the reform of international interest rate benchmarks. These relate to hedge accounting, which does not generally have to be discontinued because of the interest rate benchmark reform. Any hedge ineffectiveness must continue to be recognized through profit or loss.

The Company does not apply hedge accounting, and as such does not expect that the application of the Amendments to IFRS 9, IAS 39, IFRS 7 and IFRS 16 will have any effect on its financial statements for fiscal years from 2021 onward.

Mandatory application for fiscal years beginning on or after January 1, 2022:

Amendments to IFRS 3 *Reference to the Conceptual Framework* *(not yet endorsed by the EU)*

The proposed amendments to IFRS 3 concern references to the 2018 Framework as opposed to the 1989 Framework, which has been referenced to date. A requirement is also being added to the standard that, for transactions and other events within the scope of IAS 37 or IFRIC 21, an acquirer applies IAS 37 or IFRIC 21 (instead of the Conceptual Framework) to identify the liabilities it has assumed in a business combination. In a further supplement to the standard, clarification was added that an acquirer is prohibited from recognizing contingent assets acquired in a business combination.

The Company does not expect that the application of the Amendments to IFRS 3 will have any effect on its financial statements for fiscal years from 2022 onward.

Amendments to IAS 16 *Property, Plant and Equipment – Proceeds before Intended Use* *(not yet endorsed by the EU)*

The proposed amendments to IAS 16 introduce a prohibition on deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognizes the proceeds from selling such items, and the cost of producing those items, in profit or loss.

The Company does not expect that the application of the Amendments to IAS 16 will have any effect on its financial statements for fiscal years from 2022 onward.

Amendments to IAS 37 *Onerous Contracts – Cost of Fulfilling a Contract* *(not yet endorsed by the EU)*

The amendments to IAS 37 stipulate that, going forward, the costs a company must include as the cost of fulfilling a contract when assessing whether a contract is onerous cover the incremental costs of the contract as well as other costs that relate directly to fulfilling the contract, however not general administrative costs.

The Company will apply the amendments to IAS 37 to contracts for which not all of the obligations have been fulfilled as of the date of initial application. However, it appears very unlikely that any potential impact will be significant.

Annual Improvements to IFRS Standards (2018–2020 Cycle) *(not yet endorsed by the EU)*

The annual improvements (2018–2020 cycle) contain amendments to IFRS 1 *First-time Adoption of International Financial Reporting Standards*, IFRS 9 *Financial Instruments*, IFRS 16 *Leases* and IAS 41 *Agriculture*.

The amendments to IFRS 1 concern translation differences at subsidiaries upon the parent's transition to IFRSs. The amendments to IFRS 9 concern the fees an entity includes when it derecognizes financial liabilities in accordance with paragraph B3.3.6 of the standard.

The amendments to IFRS 16 remove an illustrative example from the standard concerning the reimbursement of leasehold improvements by the lessor.

The amendments to IAS 41 remove the requirement in force to date for entities to exclude taxation cash flows when measuring the fair value of a biological asset using a present value technique. This serves to ensure consistency with the requirements in IFRS 13.

The Company does not expect that the application of the Annual Improvements to IFRS Standards (2018–2020 Cycle) will have any effect on its financial statements for fiscal years from 2022 onward.

Mandatory application for fiscal years beginning on or after January 1, 2023:

IFRS 17 *Insurance Contracts* and amendments to IFRS 17 Insurance Contracts *(not yet endorsed by the EU)*

The new **IFRS 17** establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts within the scope of the standard. The objective of IFRS 17 is to ensure that a reporting entity provides relevant information and faithfully represents those contracts.

The Company does not expect that the application of the Amendments to IFRS 17 will have any effect on its financial statements for fiscal years from 2023 onward.

Amendments to IAS 1 *Classification of Liabilities as Current or Non-current* *(not yet adopted by the EU)*

The planned amendments to IAS 1 more precisely define the classification of liabilities as current or non-current. Classifying liabilities as current depends on the entity's rights at the end of the reporting period to defer settlement by at least twelve months after the end of the reporting period. If such rights are substantial, the liabilities must be recognized as non-current. If certain conditions must be fulfilled to exercise such rights, these must be fulfilled at the end of the reporting period, otherwise the liability is classified as current. The recognition as current or non-current is unaffected by management's intention or expectation as to whether the liabilities will actually be settled within twelve months following the end of the reporting period.

The Company does not expect that the application of the Amendments to IAS 1 will have any effect on its financial statements for fiscal years from 2023 onward.

The Company does not intend to early adopt the aforementioned new or amended accounting standards that are required to be applied from or after January 1, 2022.

Management's Judgment, Assumptions and Expectations

The management of the Company has made several judgments in the process of applying the entity's accounting policies that have a significant effect on the amounts recognized in the financial statements. Those judgments concern the capitalization of development costs and the recognition of deferred taxes. The judgments are described for each relevant position in the enumeration of accounting and valuation principles.

Management's expectations on the future are usually based on the current economic outlook according to the consensus prognoses by leading economic and financial research institutions and independent analysts. Given global developments in connection with the COVID-19 pandemic, it remains almost impossible to estimate the future economic conditions and the consequences of this crisis. Nevertheless, the Company has played out various scenarios in its planning for 2021 and developed corresponding alternatives and objectives. The assumptions made are based on factors including the estimated potential impact of the restrictions and rules imposed in response to COVID-19 on the expected behavior of the CRC screening population (which has an indirect impact on the Company's revenues) and on the continuation or resumption of the clinical studies commissioned by Epigenomics in the U.S.A.

Another factor affecting the Company's business activities in the reporting period was that its key clinical studies are primarily being carried out in the U.S.A. The pandemic has brought the majority of studies being conducted there to a virtual standstill. Firstly, it was of course generally difficult to impossible for the researchers to recruit patients, and secondly the pandemic meant that the laboratories involved faced a change in how their work is prioritized. To the extent that a notable and permanent return to normal operations fails to materialize in 2021, the Company will continue to face severe restrictions on its R&D work here. The pandemic also affected product revenue in 2020, with both the U.S.A. and Europe recording a significant drop in patients participating in routine screening. In this respect, it remains to be seen when there will be a noticeable increase in patients' willingness to undergo general preventive health care.

The plans of the Group's management do not expect Epigenomics to be highly dependent on the overall economic situation in the short term. The Group's operating activities are furthermore not highly dependent on the availability of or the price development for commodities or industrial supplies but rather on the individual situation of the Company and its opportunities to continue its operations by further financing transactions. Therefore, the Company is still dependent on the condition and the development of the capital markets (mainly in the U.S.A. and in Germany), particularly with regard to the life sciences industry. Additionally, the Company is heavily dependent on the reimbursement decisions by the payors in the U.S. healthcare system with regard to its lead product – Epi proColon, and subsequently on the commercial success of this product. Previously, the Company's strategy for the future had assumed positive reimbursement decisions in 2020 and the years to come. In its efforts to obtain approval for reimbursement, however, the Company suffered a setback shortly after the end of the reporting period that has forced it to rethink its strategy. At the current time the Executive Board and Supervisory Board have not yet finalized their discussions on the new strategy. However, the Company's primary goal remains to develop and commercialize tests for cancer detection. As of now, the focus will be on registering at highest priority the advanced version of the colorectal cancer test – Epi proColon Next-Gen – with the FDA for market approval in the U.S.A. This will require a larger clinical study that is expected to last two to three years. The expectation remains that the Company will finance this study either by finding investors who are convinced that the project will succeed or by joining forces with a strategic partner.

The COVID-19 pandemic will continue to dominate the economic conditions in Germany and the U.S.A. in 2021 and well beyond. It must also be expected that there will be additional effects on fiscal policy in these countries, although it is impossible at present to forecast either their nature and extent or their relevance to Epigenomics. With respect to regulatory requirements in the Company's primary export markets, there are currently no signs of significant changes that would affect the Company in the coming fiscal year.

All of the Company's future scenarios furthermore assume essentially unrestricted access to the relevant clinical and biological samples, corresponding clinical data and sufficient resources for the execution of the Company's commercial projects.

In the short- to medium-term, the Company expects the EUR/USD exchange rate to hover around the rate at the end of 2020, although it will remain susceptible to more pronounced fluctuations as a reaction to key global economic and geopolitical events. Management's plans for 2021 are based on an average exchange rate of EUR/USD 1.20. It also took note of the predictions of financial experts and banks as of the date on which the budget was drawn up.

The preparation of the consolidated financial statements in accordance with IFRSs requires, in the case of several items, that assumptions or estimates be made that affect the carrying amounts in the consolidated balance sheet and/or the amounts recognized in the consolidated statement of comprehensive income (consolidated statement of profit or loss and comprehensive income). This also applies to the presentation of contingent assets and liabilities. The actual amounts may vary from these assumptions and estimates.

Determining the useful life of capitalized development costs of the Company's products requires a long-term estimation of the market approval timelines for the products, their market acceptance and/or the speed of their market penetration, regulatory developments in key markets, the timing and the extent of reimbursement decisions, and competition just to name some of the most important parameters. Particularly for novel products like blood-based cancer tests there are no empirical values and less experience available, which makes any estimations difficult. The Group's management closely observes developments on the key markets and regularly reviews its own projections. Reaching or not reaching a milestone – like a market approval decision – will therefore lead to remeasurements which may possibly be decisive for a change of the previously assumed useful lives.

In particular, further assumptions and estimates are required for:

- determining the useful lives of other property, plant and equipment and non-current intangible assets,
- determining whether the criteria for the capitalization of development costs and the recoverability of internally generated intangible assets are met,
- testing assets for impairment (particularly regarding intangible assets),
- the incremental borrowing rate to be applied in calculating the present values of lease liabilities,
- assessing the possible exercise of contractual extension options,
- determining the terms of in-licensed intellectual property rights,
- determining if deferred taxes are realizable,
- determining whether financial instruments are to be classified as measured at amortized cost, fair value through other comprehensive income, or fair value through profit or loss,
- determining the fair value of financial instruments,
- setting the parameters regarding the measurement of share-based payment instruments, and
- accounting for provisions (particularly the determination of the likelihood of occurrence).

Accounting and Valuation Principles

Fair value measurement

These consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at revalued amounts or their fair values at the end of each reporting period.

For determining and disclosing the fair value of financial instruments, the Company uses the following hierarchy in accordance with IFRS 13 *Fair Value Measurement*:

Level 1: Quoted (unadjusted) prices in active markets for identical assets or liabilities
Level 2: Inputs other than quoted prices included within level 1 that are observable for assets or liabilities, either directly (as prices) or indirectly (derived from prices)
Level 3: Inputs for assets or liabilities that are not based on observable market data (unobservable inputs)

The carrying amounts of financial assets and liabilities such as cash and cash equivalents, marketable securities, trade receivables, trade payables, convertible notes and other current liabilities approximate their fair values due to their short-term maturities. The fair value of marketable securities is based on quoted market prices (level 1). There were no transfers between level 1 and level 2 fair value measurements, and no transfers into or out of level 3 fair value measurements during the reporting period.

Revenue recognition

Revenue from contracts with customers is recognized for the sale of goods and property rights (e.g., patents) or the rendering of other services when the customer obtains the control of the distinct goods or service and the customer has the ability to direct the use of and obtain the benefits from the goods or services received. The revenue recognized is the amount of the consideration that the entity would expect to be entitled to in exchange for these goods or services. If a contract includes a series of distinct goods or services, the transaction price is allocated to each performance obligation on the basis of the stand-alone selling price. If a stand-alone selling price is not directly observable, the entity reasonably estimates the stand-alone selling price. Revenue is recognized for each performance obligation either at a specific point in time or over a specific period of time.

Non-refundable prepayments received for delivering goods or performing services in the future are deferred and subsequently recognized as revenue when the goods are delivered or the services performed. Optional prolongation terms are considered individually in accordance with the underlying exercise conditions and anticipated likelihood of their exercise.

License revenue is generated by granting third parties exclusive and non-exclusive licenses in technologies and biomarkers that the Company has patented or has itself licensed. For each instance in which a license is granted, it must be determined whether the license transfers to the customer at a point in time or over time. License revenue is recognized on an accrual basis in accordance with the substance of the underlying contract. License revenue determined over time is recognized on a straight-line basis over the term of the contract. License revenue that is based on product sales and/or other reference values is recognized on the basis of the underlying contract, to the extent that those reference values can reliably be determined.

In the case of sales with a right of return, the revenue is only recognized in full when the right of return expires. At this date, the revenue is only recognized at cost less any costs of return. There were no sales with a right of return in the reporting period.

Cost of sales

Cost of sales includes expenses for material used in products sold, changes in inventories, services received in connection with product sales or other types of revenue, royalties to be paid to third parties and triggered by product sales or other types of revenue. In addition, cost of sales includes directly allocable portions of personnel costs, costs of intellectual property, depreciation, amortization and impairment, as well as *pro rata* overheads.

Other income

Other income includes third-party research grants, currency exchange rate gains, earnings from the reversal of provisions, income from the sale of assets outside of the Company's ordinary business activities, reimbursements from suppliers and insurance companies, and other non-operating earnings.

Government grants

In individual cases, cost contributions from public authorities are granted for research projects. These grants are partially paid in advance and then reported as deferred income. To some extent, grants will only be paid after the work has been performed and proven. A current asset is recorded in such cases.

Subsidies received for product development activities are deducted from capitalized development costs, and investment grants and subsidies are offset directly against the acquisition costs of the subsidized assets, i.e. in both cases the carrying amount of the asset is reduced. The grant is thus recognized as a reduced depreciation expense over the remaining useful life.

Government grants usually come with certain requirements, which have been met so far by the Company and are expected to be met going forward. Should the requirements cease to be met in the future, redemption obligations could arise which have not been recognized yet.

Research and development costs

Research and development costs (R&D costs) include the personnel costs for the R&D staff, costs of R&D material, depreciation, amortization and impairment, service fees, licensing fees and other direct expenses in connection with the Company's research and/or development activities (including clinical studies) which cannot be classified as revenue-generating activities. In addition, R&D costs include pro rata overhead costs charged to the R&D departments.

Selling, general and administrative costs

Selling, general and administrative costs (SG&A costs) include:
– all direct personnel and material expenses of the corresponding departments,
– depreciation and amortization expenses of the corresponding departments,
– other direct expenses of the corresponding departments, and
– pro rata overheads of the corresponding departments as well as the Company's statutory costs.

Other expenses

Other expenses consist of all operating expenses which do not classify as cost of sales, R&D costs or SG&A costs as defined above. This includes in particular but not exclusively

– foreign exchange rate losses,
– losses from the disposal of assets outside of the ordinary business activities, and
– expenses due to extraordinary effects or measures such as restructuring expenses or write-downs of non-current assets (e.g., goodwill impairment).

Share-based payment expenses

The fair value of granted stock options is determined in accordance with IFRS 2 *Share-based Payment* by simulation of the future movement in the Company's share capital on the basis of market parameters (e.g., volatility and risk free rate) and normal distributed random numbers ("Monte Carlo simulation"). The fair value of the stock options is expensed over the expected option term of up to four years against the capital reserve. The measurement is based on the fair value as of the grant date.

The fair value of phantom stock rights granted in previous years is calculated using the binomial model based on the Cox-Ross-Rubinstein model in accordance with IFRS 2 *Share-based Payment*, and recognized *pro rata temporis* as expenses and as a provision due to the obligation of the Company for a cash settlement in the future. If phantom stock rights are held by current employees of the Group, the related expenses are recorded as personnel costs and included in the payroll provisions. If phantom stock rights are held by former employees of the Group, the related expenses are recorded as other costs and included in other provisions.

Intangible assets

Intangible assets other than goodwill and capitalized development costs are measured at cost less straight-line amortization. Depending on the investment, the useful life of between three years (software) and twenty years (patents) will be defined. For patents, the useful life in individual cases depends on the term of the patent protection. Amortization of intangible assets is allocated in the consolidated statement of comprehensive income (consolidated statement of profit or loss and comprehensive income) to the functional area in which they are used. IAS 38 *Intangible Assets* is applied. In accordance with this standard, an intangible asset is reported if it is likely that a future economic benefit is associated with the use of such asset and that its cost can be reliably determined.

Intangible assets with indefinites useful lives and intangible assets not yet available for use are tested for impairment annually. In addition, assets or groups of assets are tested for impairment if there are any indications at the measurement date that they may be impaired. If the carrying amount of an intangible asset exceeds the recoverable amount of this asset as of the balance sheet date, this will be taken into account by means of a write-down, the amount of which is determined by the result of the impairment test. If there is no longer any indication of impairment, the impairment loss is reversed up to a maximum of the asset's amortized cost.

Right-of-use assets and leases

The Company has opted not to recognize short-term leases or leases for which the underlying asset is of low value. Instead, the associated lease payments are recognized as an expense. The material leases entered into by the Company are recognized and measured using a uniform model. The right-of-use assets representing the right to use the underlying assets are measured at cost less accumulated depreciation and are regularly tested for impairment. The right-of-use assets are depreciated on a straight-line basis over the term of the underlying leases.

At the commencement date, the lease liabilities arising from the leases are recognized at the present value of the lease (rent) payments to be made over the term of the lease. The Company calculates the present value using an incremental borrowing rate valid as of that date.

For leases with terms exceeding 12 months as of the measurement date, the corresponding lease liabilities are divided into and recognized as current liabilities (due in less than 12 months) and non-current liabilities (due after 12 months).

Capitalized development costs

Expenditure on research activities is recognized as an expense in the period in which it is incurred. An internally generated intangible asset arising from internal development is recognized if, and only if, all of the following requirements in accordance with IAS 38.57 *Intangible Assets* have been fulfilled:

- proof of the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- proof of the intention to complete the intangible asset to use or sell it;
- proof of the ability to use or sell the intangible asset;
- proof of how the intangible asset will generate probable future economic benefits;
- proof of the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset;
- demonstration of the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for the capitalization of development costs is the sum of expenditure incurred from the date when the intangible assets first met the aforementioned recognition criteria. Where no internally generated intangible asset can be recognized, development expenditure is charged to profit or loss in the period in which it is incurred. Subsequent to initial recognition, capitalized development costs are reported at cost less accumulated amortization and impairment losses, on the same basis as intangible assets acquired separately. The useful life of such capitalized development costs is assumed under consideration of the business plan and amounts to up to ten years for the currently capitalized assets. Amortization is recorded on a straight-line basis.

Property, plant and equipment

Property, plant and equipment is measured at cost less depreciation. Apart from directly attributable costs, *pro rata* overhead costs are also included in the cost of internally produced items of property, plant and equipment. The cost is reduced by public and governmental investment grants. Repair costs are immediately recorded as an expense. Leasehold improvements are depreciated on a straight-line basis over the remaining term of the underlying leases (including optional extension periods). Movable items of property, plant and equipment are depreciated on a straight-line basis. The useful life is three to ten years for technical and electronic equipment and five to ten years for operating and office equipment.

Once disposed of, the asset and its accumulated depreciation are reported as a disposal. Income or expenses resulting from the disposal of assets (proceeds less residual carrying amount) is reported in the consolidated statement of comprehensive income (consolidated statement of profit or loss and comprehensive income) under other income/other expenses.

If, based on external or internal sources of information, there are indications that the carrying amount at the balance sheet date of an item of property, plant or equipment measured as described above exceeds its recoverable amount upon disposal, the asset is tested for impairment and, if necessary, written down. The amount of the impairment is determined on the basis of the fair value of the item of property, plant and equipment less costs to sell or – if higher – the net present value of future cash flows estimated from the value in use of the item of property, plant and equipment. An impairment test will be carried out annually for assets or groups of assets for which an impairment is assumed. If there is no longer any indication of impairment, the impairment loss is reversed up to a maximum of the asset's amortized cost.

Deferred taxes

Deferred taxes are calculated in accordance with IAS 12 *Income Taxes*. They are recognized on the basis of temporary differences between the carrying amount of assets and liabilities in the financial statements in accordance with IFRS of the companies involved and in their tax accounts. Furthermore, deferred tax assets are recognized for unutilized tax loss carryforwards and unutilized tax credits to the extent that deferred tax liabilities exist, or that taxable income is likely to be available against which to utilize the benefits of the temporary differences and that these are expected to reverse in the foreseeable future. At each balance sheet date, it is determined whether or not these requirements are still met. If such a realization in the foreseeable future is not likely, a valuation allowance is recognized against the tax loss carryforwards.

Deferred tax assets and tax liabilities from temporary differences associated with investments in subsidiaries are not recognized when the timing of the reversal of the temporary difference can be controlled, and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets and liabilities are measured using the local tax rates applicable on the balance sheet date or the local tax rates which are expected to apply at the future point in time when the asset is realized or the liability settled. Tax rates are used that have been enacted or substantively enacted by the end of the reporting period. Deferred tax assets and liabilities are only offset if they relate to taxes levied by the same tax authority and if the Group intends to settle its current tax assets and liabilities on a net basis.

Inventories

Inventories consist of finished and unfinished products, raw materials, low-value consumables as well as other production supplies. They are measured at the lower of cost and net realizable value. The manufacturing costs of the finished and semi-finished products include directly attributable unit costs, depreciation, amortization of capitalized development costs and overheads attributable to the production process. For finished and semi-finished products the principle of item-by-item measurement applies.

Financial instruments

A financial instrument is a contract that gives rise to a financial asset for one contracting party and a financial liability or equity instrument for another contracting party.

At initial recognition, trade receivables without significant financing components are measured at their transaction price. All other financial assets and liabilities are initially measured at fair value.

When the Company first recognizes a financial asset, it assigns it to one of the following measurement categories:

- at amortized cost
- debt instruments at fair value through other comprehensive income (FVOCI)
- equity instruments at fair value through other comprehensive income (FVOCI)
- at fair value through profit or loss (FVTPL).

In the case of assets not at fair value through profit or loss, these are measured at initial recognition on the basis of the transaction costs directly attributable to their acquisition or issue.

Financial assets are only reclassified following initial recognition when the Company changes its business model for managing financial assets.

A financial asset is measured at amortized cost if it is not designated as at fair value through profit or loss and both of the following conditions are met:

- it is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows, and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt instrument is measured at fair value through other comprehensive income if it is not designated as at fair value through profit or loss and both of the following conditions are met:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

At initial recognition of an investment in an equity instrument that is not held for trading, the Company can make the irrevocable election to present in other comprehensive income subsequent changes in the fair value of that investment. The Company makes this election on a case-by-case basis for each investment.

All financial assets not measured at amortized cost or fair value through other comprehensive income are measured at fair value through profit or loss. This includes all derivative financial assets. The Company may, at initial recognition, irrevocably designate as measured at fair value through profit or loss financial assets that would otherwise have fulfilled the criteria for measurement at amortized cost or fair value through other comprehensive income, if doing so eliminates or significantly reduces a measurement or recognition inconsistency (accounting mismatch).

The Company assesses the objectives of the business model within which the financial assets is held. It does so at portfolio level since this is the best way to reflect how the business is managed and how information is passed on to management. The information to be taken into consideration includes:

- the disclosed policies and objectives of the portfolio and the practical implementation of those policies;
- how the portfolio's performance is measured and reported to management;
- the risks to which the performance of the business model (and the financial assets held under that business model) is exposed and how those risks are managed;
- the frequency, extent and timing of sales of financial assets in prior periods and expectations in respect of future sales activities.

Financial assets held or managed for trading whose performance is assessed on the basis of fair value are measured at fair value through profit or loss.

In order to determine whether the contractual cash flows are solely payments of principal and interest on the principal amount outstanding, "principal" is defined as the fair value of the financial asset at initial recognition. "Interest" consists of consideration for the time value of money, for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g., liquidity risk and administration costs), as well as a profit margin. In determining whether the contractual cash flows are solely payments of principal and interest on the principal amount outstanding, the Company takes into consideration the contractual terms underlying the instrument. This includes determining whether the financial asset includes a contractual term that could change the timing or amount of the contractual cash flows and thus cause this condition to no longer be met. In its assessment, the Company takes into consideration:

- specific events that would trigger a change in the timing or amount of the cash flows,
- terms that would cause the interest rate (including variable interest rate) to be adjusted,
- options for early repayment or extensions, and
- terms that limit the Company's claim to the cash flows from a specified asset.

A prepayment option fulfills the criterion of solely payments of principal and interest on the principal amount outstanding if the prepayment amount substantially represents only unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for the early termination of the contract.

Financial liabilities are classified and measured at amortized cost or at fair value through profit or loss. A financial liability is classified at fair value through profit or loss if it is held for trading, is a derivative or is designated as such at initial recognition. Measuring financial liabilities at fair value through profit or loss means that they are carried at fair value and any net gains or losses, including interest expenses, are recognized through profit or loss. Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expenses

and foreign exchange gains or losses are recognized through profit or loss. Gains or losses on derecognition are likewise recognized through profit or loss.

The Company derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire or it transfers the right to receive the cash flows as part of a transaction in which substantially all of the risks and rewards of ownership of the financial asset are also transferred. Derecognition also applies if the Company neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset and does not retain control of the transferred asset. The Company executes transactions in which it transfers the recognized assets but retains either all or substantially all of the risks and rewards of ownership of the transferred asset. In these cases, the transferred assets are not derecognized. Write-downs are generally recognized on trade receivables if they are more than one year overdue and are not subject to enforcement action.

The Company derecognizes a financial liability if the obligations specified in the contract are discharged or canceled or expire, or if the terms of the contract have been amended and the cash flows from the modified liability are significantly different. In this case, a new financial liability is recognized at fair value on the basis of the modified contractual terms. When derecognizing a financial liability, the difference between the carrying amount of the repaid liability and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognized through profit or loss.

The Company invoices its customers in accordance with the individual contractual arrangements or the valid general terms and conditions of business. The invoices are generally payable net within 30 days. Prepayment is generally a condition for new customers. In the case of license receivables, the payment terms are determined on the basis of the underlying licensing agreements. The resulting payments are either payable on demand or within a period of up to 90 days.

Cash equivalents

A cash equivalent is defined as a financial instrument which is readily convertible on a short-term basis to a known amount of cash and which is subject to an insignificant risk of changes in value (IAS 7.6 *Statement of Cash Flows*). Financial instruments generally qualify as cash equivalents when they are more closely related to the money markets than to the bond markets and have a remaining term of less than three months. They are measured at amortized cost.

Prepaid expenses

Payments before the balance sheet date in respect of expenses for a specific period after that date are deferred and reported at amortized cost as prepaid expenses in other current assets.

Deferred income

Deferred income is recognized for grants and for research and development payments ("R&D payments") received in advance. Grants received in advance for research expenses which were provided by governmental or comparable national, regional or local authorities are recognized through profit or loss as other income over the subsidized terms of each grant project according to its stage of completion. Subsidies received in advance for product development activities are deducted from capitalized development costs. Payments received in advance from customers for R&D services to be rendered by the Company in the future or for licenses are deferred and recognized through profit or loss under the terms and conditions of the contract according to the stage of project completion (cost-to-cost method).

Provisions

In accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, a provision is recognized if a present obligation exists as a result of a past event, if it is probable that an outflow of resources embodying economic benefits will be required to settle this obligation and if a reliable estimate can be made of the amount of the obligation. The amount recognized as a provision is the best estimate of the expenditure required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows expected to be required to settle the present obligation, its carrying amount is the present value of these cash flows. Obligations arising from share-based payment programs that provide for awards payable in cash (i.e., the Company's phantom stock programs) are measured at fair value and recognized as current or non-current provisions based on the remaining term of the underlying rights until these can be exercised.

Alternative performance indicators

The operating result, or rather earnings before interest and taxes (EBIT), is defined as the total comprehensive income for the year/period before other comprehensive income for the year/period, income taxes, the other financial result, interest expenses and interest income. EBITDA is defined as EBIT before depreciation and amortization. Share-based payment is defined as the expenses resulting from the change in the total fair value of all stock options and phantom stock rights granted over the fiscal year/the period. EBITDA before share-based payment expenses is defined as EBITDA before expenses resulting from share-based payment.

EBIT, EBITDA and EBITDA before share-based payment expenses are all non-IFRS measures used and defined by Epigenomics that are standard practice in global capital market communication and are sought after by analysts and investors.

Currency translation

In the separate financial statements, receivables and liabilities in foreign currencies are measured using the corresponding euro reference rate published by the European Central Bank and applicable as of the balance sheet date.

The functional and reporting currency of our U.S. subsidiary is the U.S. dollar.

For consolidation purposes, the expenses and income of the subsidiary are translated into euros at the average monthly exchange rates. The assets and liabilities of the subsidiary are translated into the Group's reporting currency (euros) at the end of each reporting period using the closing rate. Equity components that are measured in terms of historical cost in U.S. dollars are translated using the exchange rate at the date of the transaction. The resulting translation differences are accounted for separately within equity.

Foreign currency exchange rates applied in the reporting period:

	Closing rates		Average rates	
	Dec. 31, 2020	Dec. 31, 2019	2020	2019
EUR/USD	1.2271	1.1234	1.1470	1.1195

Notes to the Consolidated Statement of Comprehensive Income (Consolidated Statement of Profit or Loss and Other Comprehensive Income)

1 Revenue

Revenue by type:	2020 EUR thousand	in %	2019 EUR thousand	in %
Product sales (own and third-party)	584	69.3	988	87.8
License revenue	33	4.0	137	12.2
R&D revenue and reimbursements	225	26.7	0	0
Other revenue	0	0.0	0	0
Total revenue	**842**	**100.0**	**1,125**	**100.0**

License revenue is generated by out-licensing of own intellectual property (e.g., technologies, biomarkers) to third parties. Revenue from product sales is generated by the sale of the Group's products through own sales channels, through distribution partners or by the rendering of services by third parties based on the Company's products. R&D revenue and reimbursements are generated by rendering services in connection with contract research and by charging pass-through costs to third parties.

Revenue by geographical market:	2020 EUR thousand	in %	2019 EUR thousand	in %
Europe	290	34.4	267	23.8
North America	531	63.1	714	63.4
Asia	21	2.5	135	12.0
Rest of the world	0	0.0	9	0.8
Total revenue	**842**	**100.0**	**1,125**	**100.0**

In the reporting year, 51% of total revenue (2019: 46%) was generated by the Company's three largest customers.

2 Other income

EUR thousand	2020	2019
Foreign exchange rate gains	1,358	2,187
Income from the reversal of provisions	70	94
Recoveries and refunds	51	156
Correction of deferred liabilities	26	31
Third-party research grants from public authorities	1	17
Other	1	3
Total other income	**1,507**	**2,488**

3 Cost allocation by function

	2020				
EUR thousand	Cost of sales	R&D costs	SG&A costs	Other expenses	**Total**
Materials and consumables	137	264	221	0	**622**
Depreciation, amortization and impairment	0	254	281	0	**535**
Personnel costs	5	1,768	3,553	0	**5,326**
Other costs	3	1,373	3,246	2,871	**7,493**
Total	**145**	**3,659**	**7,301**	**2,871**	**13,976**

	2019				
EUR thousand	Cost of sales	R&D costs	SG&A costs	Other expenses	**Total**
Materials and consumables	239	1,010	15	0	**1,264**
Depreciation, amortization and impairment	0	267	246	0	**513**
Personnel costs	0	2,596	4,166	0	**6,762**
Other costs	14	3,467	4,508	1,758	**9,747**
Total	**253**	**7,340**	**8,935**	**1,758**	**18,286**

4 Personnel costs

EUR thousand	2020	2019
Wages and salaries	4,018	5,081
Share-based payment expenses	631	873
– of which expenses for issuing stock options (SO) to members of the Executive Board	*231*	*310*
– *Expenses for issuing SO to G. Hamilton (CEO)*	*108*	*175*
– *Expenses for issuing SO to Jorge Garces (CEO)*	*74*	*59*
– *Expenses for issuing SO to Albert Weber (EVP Finance)*	*49*	*76*
Social security expenses	677	808
– of which employer's contribution to a national pension fund (Germany)	*92*	*127*
– of which employer's contribution to a 401(k) savings plan (U.S.A.)	*93*	*90*
Total personnel costs	**5,326**	**6,762**

The Group employed an average of 39 employees in 2020 (2019: 43). The 37 employees as of the end of 2020 included 18 employees across the areas of research, product development, IP, regulatory affairs, quality assurance and manufacturing. Their activities are reported as R&D costs in the financial statements. The remaining 19 employees reported as selling, general and administrative functions work in business and commercial development, customer and technical service, accounting, finance, legal, human resources, IT, investor relations and general management.

Measurement of the stock options granted gave rise to share-based payment expenses amounting to EUR 631 thousand (2019: EUR 873 thousand).

5 Depreciation and amortization

EUR thousand	2020	2019
Amortization of intangible assets	193	194
– of which amortization of capitalized development costs	*119*	*119*
Depreciation of property, plant and equipment	342	319
– of which depreciation of right-of-use assets	*234*	*202*
Total depreciation and amortization	**535**	**513**

6 Other expenses

EUR thousand	2020	2019
Foreign exchange rate losses	2,871	1,757
Losses from the disposal of assets	0	1
Total other expenses	**2,871**	**1,758**

7 Operating result (EBIT) and EBITDA

EUR thousand	2020	2019
Operating result/earnings before interest and taxes (EBIT)	**-11,627**	**-14,673**
Total depreciation and amortization	535	513
EBIT before depreciation and amortization (EBITDA)	**-11,092**	**-14,160**
Share-based payment expenses	631	873
EBITDA before share-based payment expenses	**-10,461**	**-13,287**

8 Financial result

Net gains and losses on all financial instruments:

EUR thousand	2020	2019
Interest from available-for-sale financial assets	18	18
Interest on time deposits	3	154
Interest and related income	**21**	**172**
Total financial income	**21**	**172**
Other interest expenses	-55	-63
of which from leases	*-55*	*-63*
Interest and related expenses	**-55**	**-63**
Other finance costs	-2	-2
Total financial expenses	**-57**	**-65**
Total financial result	**-36**	**107**

9 Taxes on income

The reported taxes on income in the amount of EUR 23 thousand (2019: EUR 2,454 thousand) consist solely of taxes relating to the Company's U.S. subsidiary.

EUR thousand	2020	2019
Current tax expenses	23	34
Deferred tax income due to loss carryforwards	0	-732
Valuation allowance	0	3,152
Total taxes on income	**23**	**2,454**

For the calculation of deferred taxes of the U.S. subsidiary, a local tax rate of 21% was applied there.

Calculation of the applicable tax rate in Germany for the purpose of deferred taxes:

in %	2020	2019
Corporate income tax	15.0	15.0
Solidarity surcharge	5.5	5.5
Trade tax	14.35	14.35
underlying trade tax rate of assessment	*410*	*410*
Total applicable tax rate in Germany for the purpose of deferred taxes	**30.2**	**30.2**

Tax reconciliation:

EUR thousand	2020	2019
Net loss for the year before taxes on income	**-11,633**	**-14,566**
Expected tax income	**3,522**	**4,399**
applicable tax rate for the Group	*30.2 %*	*30.2%*
– permanent differences	*-40*	*-40*
– other foreign taxes	*-23*	*-34*
– effect of foreign taxes	*-297*	*-415*
– unrecognized tax loss carryforwards	*-3,185*	*-3,944*
– allowance on deferred tax assets from prior periods	*0*	*-2,420*
Effective tax income/(expense)	**-23**	**-2,454**
Effective tax rate	**-0.2 %**	**-16.9%**

The expected tax income/expense for the reporting year is calculated by applying the individual tax rates for the Group companies to the net results before taxes on income. The allowance on deferred tax assets from prior periods means that the effective tax rate for the reporting period is of little informational value. Permanent differences result from non-deductible expenses in accordance with German tax law.

10 Earnings per share

Earnings per share (basic) are calculated by dividing the net loss for the year by the weighted average number of shares issued. For reasons of comparability given the capital reduction with reverse stock split carried out in December 2020, the number of shares outstanding was adjusted retrospectively with a corresponding effect on the earnings per share reported for prior periods. The outstanding stock options and convertible notes granted by the Company are antidilutive in accordance with IAS 33.41 and 33.43 *Earnings per Share*. Therefore, the earnings per share (diluted) equal the earnings per share (basic). The number of shares issued as of the balance sheet date amounted to 5,891,230 (December 31, 2019: 5,440,961).

	2020	2019
Net loss for the year (in EUR thousand)	-11,686	-17,020
Weighted average number of shares issued	5,778,663	4,659,071
Earnings per share (basic and diluted, in EUR)	-2.02	-3.65

Notes to the Consolidated Balance Sheet

Non-current assets

11 Intangible assets

EUR thousand		Software	Licenses/patents	Development costs	Total intangible assets
Jan. 1, 2019	**Cost**	**426**	**1,038**	**3,639**	**5,103**
	Additions	52	0	0	52
	Disposals	0	-17	0	-17
	Currency translation	0	0	0	0
Dec. 31, 2019	**Cost**	**478**	**1,021**	**3,639**	**5,138**
	Additions	5	0	0	5
	Disposals	0	-1,021	0	-1,021
	Currency translation	0	0	0	0
Dec. 31, 2020	**Cost**	**483**	**0**	**3,639**	**4,122**
Jan. 1, 2019	**Accumulated amortization and impairment**	**294**	**1,026**	**3,308**	**4,628**
	Additions	63	12	119	194
	Disposals	0	-17	0	-17
	Currency translation	0	0	0	0
Dec. 31, 2019	**Accumulated amortization and impairment**	**357**	**1,021**	**3,427**	**4,805**
	Additions	74	0	119	193
	Disposals	0	-1,021	0	-1,021
	Currency translation	0	0	0	0
Dec. 31, 2020	**Accumulated amortization and impairment**	**431**	**0**	**3,546**	**3,977**
Dec. 31, 2019	**Carrying amounts**	**121**	**0**	**212**	**333**
Dec. 31, 2020	**Carrying amounts**	**52**	**0**	**93**	**145**

The capitalized development costs for Epi proColon and Epi proLung are assumed to have a useful life of ten years. The annual amortization for these assets amounted to EUR 111 thousand (Epi proColon) and EUR 8 thousand (Epi proLung).

12 Property, plant and equipment

EUR thousand		Fixtures/leasehold improvements	Technical equipment	Other property, plant and equipment	Right-of-use assets resulting from leases	Total property, plant and equipment
Jan. 1, 2019	**Cost**	**569**	**1,281**	**86**	**0**	**1,936**
	Additions	0	62	8	1,078	1,148
	Disposals	0	-19	-2	0	-21
	Currency translation	0	1	1	0	2
Dec. 31, 2019	**Cost**	**569**	**1,325**	**93**	**1,078**	**3,065**
	Additions	0	10	0	0	10
	Disposals	0	-46	0	0	-46
	Currency translation	0	-5	-2	-33	-40
Dec. 31, 2020	**Cost**	**569**	**1,284**	**91**	**1,045**	**2,989**

Jan. 1, 2019	**Accumulated depreciation and impairment**	**227**	**962**	**47**	**0**	**1,236**
	Additions	44	64	8	202	318
	Disposals	0	-19	-1	0	-20
	Currency translation	0	0	0	-1	-1
Dec. 31, 2019	**Accumulated depreciation and impairment**	**271**	**1,007**	**54**	**201**	**1,533**
	Additions	44	55	8	234	341
	Disposals	0	-46	0	0	-46
	Currency translation	0	-3	-2	-18	-23
Dec. 31, 2020	**Accumulated depreciation and impairment**	**315**	**1,013**	**60**	**417**	**1,805**
Dec. 31, 2019	**Carrying amounts**	**298**	**318**	**39**	**877**	**1,532**
Dec. 31, 2020	**Carrying amounts**	**254**	**271**	**31**	**628**	**1,184**

Subsidies received in previous years reduced the cost of individual items of property, plant and equipment. These subsidies constitute public financial assistance for businesses under the joint program for the improvement of regional economic structures (*Gemeinschaftsaufgabe "Verbesserung der regionalen Wirtschaftsstruktur"*) granted from German federal and state funds. The funding period ended on April 8, 2017. However, if certain conditions attaching to the funding are not complied with going forward, the funding sponsors may demand partial or full repayment of the subsidies in the following years. These conditions include preserving the current permanent jobs at the Company's Berlin site and the obligation to keep the subsidized assets for a period of at least five years after the end of the project at the subsidized location. The Company assumes that it will be able to fulfill all of the conditions.

The right-of-use assets were recognized in relation to the Group's leases for office and laboratory premises at the Berlin and Seattle locations that were subject to initial recognition in 2019 as part of the mandatory initial application of IFRS 16 *Leases*. On initial application, the Company exercised the practical expedient to apply a single discount rate to a portfolio of leases with reasonably similar characteristics. The lease for the Berlin site currently has a term until April 2023. The Company has an option to extend the lease by three years until April 2026. In the valuation, the Company assumed that it will exercise the extension option. The lease for the San Diego site currently runs until December 2021. As of the date of initial application, the Group did not have any leases with a remaining term of less than 12 months. In accordance with the recognition exemption, leases of low-value assets were not recognized. Instead, an expense of EUR 27 thousand was recognized through profit or loss. Short-term leases were likewise not recognized, with EUR 15 thousand instead being recognized as an expense.

13 Assets schedule

EUR thousand		Intangible assets	Property, plant and equipment	Total intangible assets and property, plant and equipment
Jan. 1, 2019	**Cost**	**5,103**	**1,936**	**7,039**
	Additions	52	1,148	1,200
	Disposals	-17	-21	-38
	Currency translation	0	2	2
Dec. 31, 2019	**Cost**	**5,138**	**3,065**	**8,203**
	Additions	5	10	15
	Disposals	-1,021	-46	-1,067
	Currency translation	0	-40	-40
Dec. 31, 2020	**Cost**	**4,122**	**2,989**	**7,111**

Jan. 1, 2019	**Accumulated depreciation/amortization and impairment**	**4,628**	**1,236**	**5,864**
	Additions	194	318	512
	Disposals	-17	-20	-37
	Currency translation	0	-1	-1
Dec. 31, 2019	**Accumulated depreciation/amortization and impairment**	**4,805**	**1,533**	**6,338**
	Additions	193	341	534
	Disposals	-1,021	-46	-1,067
	Currency translation	0	-23	-23
Dec. 31, 2020	**Accumulated depreciation/amortization and impairment**	**3,977**	**1,805**	**5,782**
Dec. 31, 2019	**Carrying amounts**	**333**	**1,532**	**1,865**
Dec. 31, 2020	**Carrying amounts**	**145**	**1,184**	**1,329**

14 Deferred taxes

For the Group, deferred taxes arise as described in the following table:

EUR thousand	Deferred tax assets from temporary differences		Deferred tax liabilities from temporary differences	
	Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2020	Dec. 31, 2019
Intangible assets and property, plant and equipment	0	0	165	227
Current assets	0	0	30	0
Non-current liabilities	0	0	139	164
Current liabilities	0	0	25	34
Total	**0**	**0**	**359**	**425**
Total after offsetting	**0**	**0**	**359**	**425**

Overview of tax loss carryforwards (2020 estimated):

EUR thousand	2020	2019
Tax loss carryforwards in Germany (corporate income tax)	218,719	210,874
Tax loss carryforwards in Germany (trade tax)	217,025	209,180
Tax loss carryforwards in the U.S.A. (corporate income tax)	17,504	15,976
R&D tax credits in the U.S.A.	3,424	3,641

Reconciliation of deferred tax assets (2020 estimated):

EUR thousand	Dec. 31, 2020	Dec. 31, 2019
Deferred tax assets due to German tax loss carryforwards	66,053	63,388
Deferred tax assets due to U.S. tax credits	3,424	3,641
Deferred tax assets due to U.S. tax loss carryforwards	3,676	3,355
Total deferred tax assets due to tax loss carryforwards	73,153	70,420
Deferred tax position (net) from temporary differences	-359	-425
Total deferred tax assets	**72,794**	**69,995**
Allowance on deferred tax assets	-72,794	-69,955
Recognized deferred tax assets	**0**	**0**

Since all deferred tax assets and liabilities arising from temporary differences must be settled with the same tax authority that levied the taxes to which those deferred tax assets and liabilities relate, in accordance with IAS 12.71 *et seq*. *Income Taxes*, only those deferred tax assets and liabilities which relate to taxes levied by the same tax authority have been offset.

Since its founding through to December 31, 2019, the Company's tax loss carryforwards in Germany amounted to EUR 211 million for corporate income tax and to EUR 209 million for trade tax. Furthermore, the Company estimates that the accumulated tax loss carryforwards in both aforementioned tax categories will increase by more than EUR 8 million when it files its tax returns for 2020. In accordance with German tax law, such tax losses have an unlimited carryforward period. As a consequence of completed tax audits, tax loss carryforwards in the amount of EUR 167 million are undisputed. The resulting deferred tax asset is therefore sufficient to offset the aforementioned deferred tax liability from temporary differences of EUR 359 thousand as of December 31, 2020. However, a future utilization of these carryforwards could become impossible under certain conditions (e.g., a major change of ownership and a change of business) based on the applicable German tax law. Due to the current financial situation of the Company, without sufficient liquidity to achieve the break-even point, valuation allowances have been recognized for the calculated exceeding amount of deferred tax assets at the balance sheet date.

The temporary differences connected with shares in subsidiaries, for which no deferred tax assets had been recognized in the reporting periods presented, amounted to a total of EUR 17,854 thousand (2019: EUR 16,137 thousand).

The R&D tax credits in the U.S.A. expire on various dates beginning in 2022 through to 2040.

Current assets

15 Inventories

EUR thousand	Dec. 31, 2020	Dec. 31, 2019
Consumables, raw materials, supplies	42	42
Semi-finished goods	19	47
Finished goods	61	224
Total inventories	**122**	**313**

The cost of inventories recognized as R&D costs through profit or loss in 2020 amounted to EUR 0 thousand (2019: EUR 352 thousand).

16 Trade receivables

Trade receivables primarily include receivables from development partners, customers and licensees. These receivables do not bear interest and are therefore not exposed to any interest rate risk. The carrying amounts of the receivables correspond to their fair values. The maximum default risk corresponded to the carrying amount as of the balance sheet date.

EUR thousand	Dec. 31, 2020	Dec. 31, 2019
Trade receivables	251	89
– *of which not yet due*	*186*	*21*
– *of which past due (up to 90 days)*	*19*	*19*
– *of which not yet invoiced (assets from contractual relationships)*	*46*	*49*

No allowances for doubtful accounts had been recognized as of the balance sheet date.

17 Marketable securities

The marketable securities in the amount of EUR 961 thousand as of December 31, 2020 (December 31, 2019: EUR 880 thousand) are so-called "Trust-preferred Securities" issued by a wholly owned subsidiary of Deutsche Bank AG. At the issuer's discretion, they are redeemable at any time in one payment. In prior periods they had been held as "available-for-sale" financial instruments in accordance with IFRS 9 *Financial Instruments*. Since the Company does not intend to trade them, they are classified as measured at fair value through other comprehensive income.

The reported securities are denominated in euros and are subject to the usual market and interest risks. The interest rate risks are price risks and interest rate cash flow risks. The fair value of the marketable securities is identified by their stock exchange quotations at each relevant balance sheet date. The securities were traded on active markets in the reporting year.

18 Cash and cash equivalents

Cash and cash equivalents decreased to EUR 3,566 thousand as of the balance sheet date (December 31, 2019: EUR 10,155 thousand). 80.3% of those funds was denominated in euros at the balance sheet date, with the remainder denominated in U.S. dollars. The total amount was deposited in current accounts at three different banks.

At the balance sheet date, an amount of EUR 81 thousand of bank deposits was restricted cash.

19 Other current assets

EUR thousand	Dec. 31, 2020	Dec. 31, 2019
Prepaid expenses	314	268
Receivables from tax authorities	141	294
Receivables from the Federal Employment Office (*Bundesagentur für Arbeit*)	45	0
Claims under enforcement proceedings	28	0
Security deposit	20	22
Interest receivables	9	12
Claims under insurance contracts	0	78
Other	12	12
Total other current assets	**569**	**686**

20 Share Categories and Capital Structure

As of December 31, 2020, the share capital of Epigenomics AG consisted exclusively of non-par value ordinary registered shares with equal rights. The reverse stock split approved by the extraordinary General Shareholders' Meeting on November 27, 2020 was carried out on the Company's shares in a ratio of 8:1 in the December of the reporting period. As a result, eight old Epigenomics shares (securities identification number: A1K051) were combined to form one new Epigenomics share (securities identification number: A3H218). This reduced the share capital from EUR 47,129,846 to EUR 5,891,230, composed of 5,891,230 non-par value ordinary registered shares. The table below shows the Company's equity structure on December 31.

Equity structure of the Company as of the balance sheet date:

EUR	Dec. 31, 2020	Dec. 31, 2019
Subscribed capital	**5,891,230**	**43,527,692**
Authorized Capital	**23,564,923**	**10,504,618**
* Authorized Capital 2019/I	0	3,602,154
* Authorized Capital 2019/II	0	6,902,464
* Authorized Capital 2020/I	4,712,984	0
* Authorized Capital 2020/I	18,851,939	0
Conditional Capital	**23,564,923**	**17,989,705**
* Conditional Capital IX	0	521,095
* Conditional Capital X	0	14,468,610
* Conditional Capital XI	1,000,000	1,000,000
* Conditional Capital XII	1,000,000	1,000,000
* Conditional Capital XIII	1,000,000	1,000,000
* Conditional Capital XIV	20,564,923	0

By a resolution of the Annual General Shareholders' Meeting of the Company dated June 12, 2020, Authorized Capital 2020/I and Authorized Capital 2020/II were newly created and Authorized Capital 2019/II, which had partly been utilized in 2019 in the context of a rights issue and had consequently amounted to up to EUR 6,902,464.00 until the above Annual General Shareholders' Meeting, was revoked. Authorized Capital 2019/I was fully utilized in the reporting period due to a capital increase conducted as a private placement of new shares.

By a resolution of the Annual General Shareholders' Meeting of the Company dated June 12, 2020, Conditional Capital IX and Conditional Capital X were revoked and Conditional Capital XIV was newly created.

Authorized Capital 2020/I

The Executive Board is authorized until June 11, 2025, to increase, with the consent of the Supervisory Board, the share capital of the Company once or several times by up to a total of EUR 4,712,984.00 against cash and/or in-kind contributions by issuing new non-par value registered shares (Authorized Capital 2020/I). Subscription rights shall be granted to the shareholders. The new shares can also be subscribed by one or more credit institutions or undertakings acting pursuant to section 53 (1) sentence 1 or section 53b (1) sentence 1 or (7) of the German Banking Act (*Kreditwesengesetz* – KWG) under the obligation to offer the shares to the shareholders for subscription (indirect subscription right). The Executive Board is, however, authorized to exclude, with the consent of the Supervisory Board, the shareholders' statutory subscription rights in the following events:

- for fractional amounts;
- if the new shares are issued according to section 186 (3) sentence 4 of the German Stock Corporation Act (*Aktiengesetz* – AktG) against contribution in cash at an issue price which is not significantly below the stock exchange price of the shares already listed and the pro rata notional portion of the share capital represented by the new shares does not exceed ten per cent (10%) of the share capital at the time this authorization is registered with the commercial register, or, if lower, at the respective time when the authorization is exercised. The 10% limitation shall include other shares which have been newly issued by the Company by way of a capital increase against contribution in cash during the term of this authorization pursuant to section 186 (3) sentence 4 AktG or pursuant to section 203 in conjunction with section 186 (3) sentence 4 AktG, or which have been sold following a repurchase in accordance with section 71 (1) no. 8 AktG in conjunction with section 186 (3) sentence 4 AktG, in each case under exclusion of subscription rights. Furthermore, the 10% limitation shall include shares for which there is an option or conversion right or obligation, or a share delivery right in favor of the Company, based on bonds with warrants or convertible bonds or participation rights or combinations of those instruments that have been issued during the term of this authorization under exclusion subscription rights pursuant to section 221 (4) sentence 2 in conjunction with section 186 (3) sentence 4 AktG by the Company or a dependent entity of the Company within the meaning of section 17 AktG;
- to the extent necessary to grant subscription rights for new shares to holders or creditors of option rights, convertible bonds or participation rights or combinations of those instruments issued by the Company or a dependent entity of the Company within the meaning of section 17 AktG in the amount in which they would be entitled thereto upon the exercise of the option or conversion rights or the exercise of share delivery rights, or performance of conversion or option obligations.

The Executive Board is further authorized to determine, with the consent of the Supervisory Board, the dividend rights of the new shares in deviation from section 60 (2) AktG as well as the further details of the implementation of capital increases from Authorized Capital 2020/I. The Supervisory Board is authorized to amend the wording of the Articles of Association, as appropriate, after implementation of a capital increase from the Authorized Capital 2020/I in accordance with the respective share capital increase or after expiry of the term of the authorization.

Authorized Capital 2020/II

The Executive Board is authorized until June 11, 2025, to increase, with the consent of the Supervisory Board, the share capital of the Company once or several times by up to a total of EUR 18,851,939.00 against cash and/or in-kind contributions by issuing new non-par value registered shares (Authorized Capital 2020/II). Subscription rights shall be granted to the shareholders. The Company shall organize stock market trading of the subscription rights. The new shares can also be subscribed by one or more credit institutions or undertakings acting pursuant to section 53 (1) sentence 1 or section 53b (1) sentence 1 or (7) of the German Banking Act (*Kreditwesengesetz* – KWG) under the obligation to offer the shares to the shareholders for subscription (indirect subscription right). The Executive Board is, however, authorized to exclude, with the consent of the Supervisory Board, the shareholders' statutory subscription rights for fractional amounts. The Executive Board is further authorized to determine, with the consent of the Supervisory Board, the dividend rights of the new shares in deviation from section 60 (2) AktG as well as the further details of the implementation of capital increases from Authorized Capital 2020/II. The Supervisory Board is authorized to amend the wording of the Articles of Association, as appropriate, after implementation of a share capital increase from Authorized Capital 2020/II in accordance with the respective share capital increase or after expiry of the term of the authorization.

Conditional Capital XI

The share capital is conditionally increased by up to EUR 1,000,000.00 by means of issuing up to 1,000,000 new non-par value registered shares (Conditional Capital XI). The conditional capital increase serves to grant or issue shares to members of the Executive Board of the Company, to members of the management of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG and to employees of the Company and of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG who exercise the subscription rights they were granted prior to the end of April 30, 2018 pursuant to the authorization resolution of the General Shareholders' Meeting dated May 25, 2016 (Stock Option Program 16–18). The new shares are issued against payment by the beneficiary to the Company of the respective exercise price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is to be implemented only if subscription rights are issued in accordance with the authorization resolution on the Company's Stock Option Program 16–18 by the General Shareholders' Meeting dated May 25, 2016 and only to the extent that the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares issued carry dividend rights from the beginning of the fiscal year in which they are created. The Executive Board may determine, as far as legally permissible and with the consent of the Supervisory Board, that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall be entitled to dividends from the beginning of the fiscal year immediately preceding the year of issue; if the new shares are issued to members of the Executive Board, the Supervisory Board is authorized to do so.

Between 2016 and 2018 the maximum permitted number of share options were issued based on Conditional Capital XI. In accordance with the terms and conditions of the stock option program, since October 2020 it has been possible to create new shares upon exercise of these stock options. However, no option rights have been exercised under this program to date.

Conditional Capital XII

The share capital is conditionally increased by up to EUR 1,000,000.00 by means of issuing up to 1,000,000 new non-par value registered shares (Conditional Capital XII). The conditional capital increase serves to grant or issue shares to members of the Executive Board of the Company, to members of the management of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG and to employees of the Company and of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG who exercise the subscription rights they were granted prior to the end of April 30, 2019 pursuant to the authorization resolution of the General Shareholders' Meeting dated May 30, 2017 (Stock Option Program 17–19). The new shares are issued against payment by the beneficiary to the Company of the respective exercise price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is to be implemented only if subscription rights are issued in accordance with the authorization resolution on the Company's Stock Option Program 17-19 by the General Shareholders' Meeting dated May 30, 2017 and only to the extent that the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares issued carry dividend rights from the beginning of the fiscal year in which they are created. The Executive Board may determine, as far as legally permissible and with the consent of the Supervisory Board, that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall be entitled to dividends from the beginning of the fiscal year immediately preceding the year of issue; if the new shares are issued to members of the Executive Board, the Supervisory Board is authorized to do so.

Between 2017 and 2019 the maximum permitted number of share options were issued based on Conditional Capital XII. In accordance with the terms and conditions of the stock option program, no new shares can be created upon exercise of these stock options before April 2022.

Conditional Capital XIII

The share capital is conditionally increased by up to EUR 1,000,000.00 by means of issuing up to 1,000,000 new non-par value registered shares (Conditional Capital XIII). The conditional capital increase serves to grant or issue shares to members of the Executive Board of the Company, to members of the management of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG and to employees of the Company and of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG who exercise the subscription rights they were granted prior to the end of May 31, 2021 pursuant to the authorization resolution of the General Shareholders' Meeting dated May 15, 2019 (Stock Option Program 19-21). The new shares are issued against payment by the beneficiary to the Company of the respective exercise price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is to be implemented only if subscription rights are issued in accordance with the authorization resolution on the

Company's Stock Option Program 19-21 by the General Shareholders' Meeting dated May 15, 2019 and only to the extent that the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares issued carry dividend rights from the beginning of the fiscal year in which they are created. The Executive Board may determine, as far as legally permissible and with the consent of the Supervisory Board, that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall be entitled to dividends from the beginning of the fiscal year immediately preceding the year of issue; if the new shares are issued to members of the Executive Board, the Supervisory Board is authorized to do so.

The Supervisory Board is also authorized to determine the further details concerning the implementation of the conditional capital increase where the granting of subscription rights to members of the Executive Board is concerned. In all other cases, the Executive Board is authorized to determine such details.

With relation to Conditional Capital XIII, 62,803 stock options were still outstanding as of the end of the reporting period. In accordance with the terms and conditions of the stock option program, no new shares can be created upon exercise of these stock options before April 2024.

Conditional Capital XIV

The share capital is conditionally increased by up to EUR 20,564,923.00 by means of issuing up to 20,564,923 new non-par value registered shares (Conditional Capital XIV). The conditional capital increase serves to grant shares to the holders or creditors of bonds or participation rights, such shares being issued by the Company, or a Group company within the meaning of section 18 AktG in which the Company directly and/or indirectly holds an interest of at least 90%, until June 11, 2025 on the basis of the authorization resolution of the General Shareholders' Meeting dated June 12, 2020 if option or conversion rights are exercised, if option or conversion obligations are performed or if the Company exercises its optional right to deliver shares of the Company instead of payment of the cash amount due (or parts thereof). The new shares are issued at the respective option or conversion price to be determined in accordance with the authorization resolution of the Annual General Shareholders' Meeting dated June 12, 2020.

The conditional capital increase is only to be implemented if bonds or participation rights are issued in accordance with the authorization resolution of the General Shareholders' Meeting dated June 12, 2020, and only to the extent that
- option or conversion rights are exercised or
- holders or creditors of bonds or participation rights who are under an obligation to exercise an option or under a conversion obligation perform their obligation to exercise the option or their conversion obligation or
- the Company exercises its optional right to deliver shares of the Company instead of paying the cash amount due (or parts thereof)

and to the extent that no cash settlement is granted and no shares from an authorized capital, treasury shares or shares of another listed company are delivered. The new shares issued carry dividend rights from the beginning of the fiscal year in which they are issued. The Executive Board is authorized, as far as legally permissible and with the consent of the Supervisory Board, to determine that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall carry dividend rights from the beginning of the fiscal year immediately preceding the year of issue. The Executive Board is also authorized, with the consent of the Supervisory Board, to determine the further details concerning the implementation of the conditional capital increase.

21 Capital reserve

The capital reserve comprises the premiums arising on the issuance of shares and the expenses relating to the issuance of shares, as well as expenses from the issue of stock options to Executive Board and staff members.

The capital reserve initially increased in the reporting period from EUR 69,251 thousand as of December 31, 2019 to EUR 69,922 thousand as of September 30, 2020. An increase of EUR 396 thousand was attributable to the capital increase in the March of the reporting period through issuing new shares from authorized capital. At the same time, however, the amount of the reserve decreased by EUR 295 thousand due to the costs of creating the new shares as part of this transaction. An increase of EUR 570 thousand was attributable to the issuance of stock options to Executive Board and staff members (2019: EUR 873 thousand).

The capital reduction resolved by the extraordinary General Shareholders' Meeting in November was carried out in the fourth quarter of 2020 (see note 20 "Share Categories and Capital Structure"). A portion of the reduction amounting to EUR 17,458 thousand was transferred to the capital reserve. This ultimately increased as of the end of the reporting period from EUR 61 thousand to EUR 87,419 thousand, including the issue of stock options to Executive Board and staff members in the fourth quarter.

22 Retained earnings

The net loss of EUR 17,020 thousand for 2019 initially added to the retained earnings of EUR -85,807 thousand reported as of December 31, 2019. In the context of the capital reduction in November (see note 20 "Share Categories and Capital Structure"), a EUR 23,781 thousand portion of the overall reduction was used to top up retained earnings, which consequently fell to EUR -79,046 thousand as of the end of the reporting period.

23 Other comprehensive income

The other comprehensive income includes unrealized gains and/or losses on marketable securities and exchange rate differences from the remeasurement of the results and the financial position of the Company's subsidiary whose financial statements were prepared in U.S. dollars. The actual disposal of remeasured financial assets and/or liabilities leads to a recognition of the cumulated revaluation differences through profit or loss.

EUR thousand

	Dec. 31, 2020	Dec. 31, 2019
January 1	**-323**	**-404**
– Remeasurement of marketable securities	81	228
– Exchange rate differences	1,528	-147
December 31	**1,286**	**-323**

24 Capital Management

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern while maximizing the long-term return to stakeholders. An optimization of the debt/equity ratio is always considered.

The current liabilities, cash and cash equivalents, the marketable securities and equity attributable to equity holders, comprising subscribed capital, capital reserve (including offset retained earnings) and other comprehensive income are subject to the Group's capital management.

In the reporting period, the Group's equity ratio declined from 68.8% as of December 31, 2019 to 56.8% as of December 31, 2020.

The Company is not subject to any statutory capital requirements. However, the Company is obliged to issue new shares in connection with granted option rights from its existing stock option programs.

25 Provisions

Statement of changes in provisions:

EUR thousand	Contract-related provisions	Payroll provisions	Provisions for claims from phantom stock rights	Other provisions	**Total**
Jan. 1, 2019	**50**	**879**	**20**	**60**	**1,009**
of which non-current	*0*	*0*	*0*	*47*	***47***
Utilizations	0	-879	0	-11	**-890**
Reversals	-50	-19	-20	-8	**-97**
Additions	0	84	0	538	**622**
Dec. 31, 2019	**0**	**65**	**0**	**579**	**644**
of which non-current	*0*	*0*	*0*	*44*	***44***
Utilizations	0	-50	0	-314	**-364**
Reversals	0	-15	0	-55	**-70**
Additions	0	613	0	92	**705**
Dec. 31, 2020	**0**	**613**	**0**	**302**	**915**
of which non-current	***0***	***0***	***0***	***36***	***36***

Payroll provisions were recognized for obligations from bonus commitments to management and employees of the Company. These provisions may in individual cases also be utilized beyond a twelve-month time frame.

Provisions for claims from phantom stock rights (PSRs) were recognized based on the fair value of all issued and outstanding rights resulting from the Company's phantom stock programs (PSPs). All phantom stock rights expired in 2020 and as such the provisions were fully reversed in the reporting period.

Other provisions were recognized for various operating obligations which were uncertain as of the reporting date with respect to their exact amounts and/or timing. A utilization of both of these categories of provisions is largely expected within the next twelve months.

26 Trade payables

The reported trade payables in the amount of EUR 629 thousand as of the balance sheet date (December 31, 2019: EUR 1,430 thousand) are all non-interest-bearing. The total amount comprises exclusively non-derivative financial liabilities that are due in full within two months following the reporting date.

27 Other liabilities

EUR thousand	Dec. 31, 2020	Dec. 31, 2019
Payables due to staff	430	1,089
Accrued audit fees	138	127
Payables due to tax authorities	33	69
Payables due to Supervisory Board members	22	31
Advance payments	0	46
Other	4	6
Total other liabilities	**627**	**1,368**

The reported other liabilities are exclusively non-interest-bearing. They comprise non-derivative financial liabilities amounting to EUR 201 thousand that are due exclusively within two months following the reporting date.

28 Maturities of financial liabilities

The table below shows the maturities of the Company's liabilities as of the end of the reporting period based on undiscounted contractual payments.

EUR thousand

	up to 3 months	3 to 12 months	1 to 5 years	over 5 years	Total
Trade payables	629	0	0	0	**629**
Lease liabilities	65	195	483	42	**785**
Other financial liabilities	168	0	0	0	**168**
Total	**862**	**195**	**483**	**42**	**1,582**

29 Financial instruments and financial liabilities from financing activities

AC = measured at amortized cost
FVOCI = measured at fair value through other comprehensive income

1 Primary financial instruments

EUR thousand	Measurement principle	Fair value hierarchy level	Carrying amount as of Dec. 31, 2020	Fair value as of Dec. 31, 2020	Carrying amount as of Dec. 31, 2019	Fair value as of Dec. 31, 2019
Assets						
Marketable securities	FVOCI	1	961	961	880	880
Cash and cash equivalents	AC		3,566	3,566	10,155	10,155

Net liabilities from financing activities

TEUR	Note	Jan 01, 2020	Reclassification (current/ non current)	Additions	Interest expenses	Other effects	Cashflows	Dec 31, 2020
Prepayments for financial projects	19	0	0	-100	0	0	0	-100
Trade payables	26	431	0	100	0	0	-431	100
Non-current lease liabilities	28	697	-278	0	55	-14	0	460
Current lease liabilities	28	216	278	0	0	-3	-268	223
Total		**1.344**	**0**	**0**	**55**	**-17**	**-699**	**683**

Notes to the Consolidated Statement of Cash Flows

Cash consists of bank deposits and cash in hand. Cash equivalents are defined as instruments convertible to a known amount of cash on a short-term basis and carrying a very low risk of changes in value. As of the balance sheet date, the Company's cash and cash equivalents balance sheet item comprised exclusively cash. For the cash flow consolidation of the U.S. subsidiary, the operating assets and liabilities (excluding cash and cash equivalents) were translated at the average monthly exchange rates.

30 Operating activities

Cash flow from operating activities is derived indirectly on the basis of the net profit/loss for the year.

31 Investing activities

Cash flow from investing activities is calculated based on actual payments.

32 Financing activities

Cash flow from financing activities is calculated based on actual payments.

Gross proceeds from the issue of new shares in the amount of EUR 3,998 thousand in the reporting year (2019: EUR 8,332 thousand) related to the Company's capital increase from authorized capital in 2020. The cash outflow from financing activities amounted to EUR 748 thousand in 2020 (2019: EUR 983 thousand) and related to the above-mentioned capital increase and for the capital reduction. EUR 268 thousand was paid out for leases (2019: EUR 229 thousand).

33 Cash consumption

Cash flow from operating activities and cash flow from investing activities less transactions in securities is monitored by the Company as "cash consumption".

EUR thousand

	2020	2019
Cash flow from operating activities	-9,571	-13,506
Cash flow from investing activities	3	47
Net proceeds from transactions in securities	0	0
Cash consumption	**-9,568**	**-13,459**

Risks and Risk Management

34 General

For a comprehensive overview of the risks the Company is facing, please refer to the "Report on opportunities and risks" section of the Group management report 2020.

35 Liquidity risk

The liquidity risk to which Epigenomics is exposed results from the Group's potential inability to meet its financial liabilities, i.e., not being able to pay its suppliers, creditors or lenders. It is therefore the task of cash and liquidity management to ensure the individual Group companies' liquidity at any time. The expected cash inflows and outflows are constantly monitored to ensure short-term liquidity. These activities are supported by internal cash forecasts and a corresponding strategy of managing time deposits with the Company's principal banks.

Furthermore, Epigenomics constantly monitors the capital markets and – if required – makes all necessary efforts to raise fresh capital in order to avoid illiquidity.

Epigenomics has strict cost management in place to avoid unnecessary spending. On the procurement side, the Company always tries to reduce purchase prices by closing favorable contracts and negotiating all relevant conditions and takes advantage of granted terms of payment.

36 Foreign currency exchange risk

The Group executes transactions denominated in foreign currencies and is therefore exposed to the risk of exchange rate fluctuations. This risk is due on the one hand to the fact that the German parent company purchases some goods and services in U.S. dollars. On the other hand, Epigenomics markets its primary product – Epi proColon – in the U.S.A., and revenue is generated by the Group's U.S. subsidiary, Epigenomics, Inc., in U.S. dollars, while the kits are manufactured and billed to the contract manufacturer primarily in euros. This leads to an increased foreign currency exchange (FX) risk for the Group. This risk is reduced by utilizing the proceeds generated in U.S. dollars to finance the operating business activities

of Epigenomics, Inc. (e.g., to purchase goods and services). With regard to U.S. dollar amounts in excess of the U.S. subsidiary's mid- to long-term cash requirements, the Group will constantly try to mitigate or to eliminate the remaining risk as far as possible, for example through the use of derivative financial instruments (e.g., forward contracts) to minimize this risk. As of the balance sheet date, there was only a very limited number and volume of items denominated in foreign currencies other than the U.S. dollar.

The following table shows the carrying amounts of the Group's foreign currency denominated monetary assets and liabilities:

EUR thousand

	Dec. 31, 2020			Dec. 31, 2019		
Primary financial instruments	Total	of which in USD	in %	Total	of which in USD	in %
Trade receivables	251	232	92.4	89	78	88.2
Marketable securities	961	0	0.0	880	0	0.0
Cash and cash equivalents	3,566	700	19.6	10,155	3,099	30.5
Other current assets	114	19	16.7	124	21	16.6
Non-current lease liabilities	-460	0	0.0	-696	-154	22.1
Trade payables	-629	-269	42.8	-1,430	-717	50.2
Current lease liabilities	-223	-141	63.1	-216	-141	65.4
Other current liabilities	-627	-303	48.3	-1,126	-247	21.9
Total net position	**2,953**	**238**	**8.1**	**7,779**	**1,939**	**24.9**
** of which in third currencies*	*0*			*0*		

The sensitivity of the Group's net result and of shareholders' equity to foreign currency exchange rate fluctuations is shown in the table below:

EUR thousand

Scenario	Impact on	2020	**2019**
10% increase in the EUR/USD rate	Total comprehensive income	**-18**	**-157**
	Equity	**1,566**	**1,425**
10% decrease in the EUR/USD rate	Total comprehensive income	**22**	**192**
	Equity	**-1,914**	**-1,741**

The table shows that exchange rate fluctuations had a stronger impact on equity in the reporting year than in fiscal year 2019, although the impact on total comprehensive income was weaker over the same period.

37 Credit risk

Credit risk is the risk that a counterparty will fail to meet its obligations under a financial instrument or customer contract, resulting in a financial loss. The Company is routinely exposed to credit risk arising in its business and investment activities. It also affects deposits at banks and other financial institutions, and other financial instruments.

The Company holds its liquid assets at three different banks, thereby reducing the credit risk with respect to bank deposits.

Securities have only been acquired under careful adherence to the Company's investment policy, i.e., a strict selection by the credit ratings of the issuers has been conducted. However, the global financial crises in recent years have shown that even top-rated issuers can suddenly find themselves in a precarious situation or even facing collapse. Additionally, it has become clear that there is a constant risk of illiquid markets.

Customer-related credit risk is managed both centrally and at the level of the respective Group entity responsible for managing the relevant customer relationships. Monitoring covers receivables outstanding from customers and the order volume. The Group currently assesses risk concentrations in relation to trade receivables and receivables due under contracts as low, since on the one hand these are mainly due from well-known business partners with impeccable credit ratings, and on the other only immaterial volumes are due from small clients (primarily laboratories, clinics and universities). Whenever possible, payments are collected upfront. The Company maintains a long-standing, good contractual relationship with its major partners

To estimate potential credit losses, trade receivables and open order backlogs are grouped together according to common credit risk characteristics (e.g., existing default in days).

The expected rates of loss are based on customers' payment profiles, as measured by sales over a period of at least 12 months before the end of each reporting period and the corresponding historical credit losses that have arisen during that period. Historical rates of loss are adjusted where necessary to reflect current and forward-looking information about macroeconomic factors affecting customers' ability to pay debts as they fall due. Based on these criteria, the Company's customer base exhibits extremely low credit risk and the Company assumes that the economic situation in the U.S.A., China and Europe will remain robust, particularly with regard to the healthcare sector. The expected default rate for trade receivables and contract assets currently amounts to 0%.

38 Interest rate risk

The Group holds interest-bearing financial instruments only in the form of marketable securities.

Given the historically low interest rates on the international capital markets, the Group is currently not exposed to any interest rate risks from its cash and cash equivalents item.

Information on Share-based Payment Plans[1]

39 Description of stock option programs

As of the balance sheet date, the Company had the following stock option programs (SOPs) in place:

Both the SOP 09–13 and SOP 11–15 programs have expired. Stock options can no longer be granted from these programs or from SOP 16–17 and SOP 17–19.

On May 25, 2016, the General Shareholders' Meeting resolved to implement a new stock option program (SOP 16–18) based on the new Conditional Capital XI (see also note 20 "Share Categories and Capital Structure"). Under this program, the Executive Board and the Supervisory Board of the Company were authorized, until the end of April 30, 2018, to issue stock options in accordance with the provisions set forth below to members of the Executive Board and to employees of the Company as well as to members of the management and to employees of domestic and foreign dependent companies of the Company provided that each stock option so issued entitles the beneficiary to subscribe for one non-par value registered share of the Company. Under this authorization, the Executive Board and the Supervisory Board have issued the maximum number of stock options, a total of 125,000, which entitle the beneficiaries to subscribe for no more than 125,000 non-par value registered shares of the Company.

The beneficiaries were the members of the Executive Board of the Company (group 1), the employees of the Company (group 2), the members of the management of subordinated Group companies (group 3) and the employees of subordinated Group companies (group 4).

The subscription rights may only be exercised outside the blackout periods. Blackout periods means the periods between the end of the fiscal year and the publication of the annual report and the consolidated financial statements for the respective fiscal year, and between the end of the first, second and third quarters of a fiscal year and the publication of a quarterly report or a quarterly announcement of the Company for the respective quarter.

A quarter of the subscription rights in every tranche shall vest for the beneficiaries one year, two years, three years and four years, respectively, after the issue date of the respective tranche. In deviation from the above provision, the Supervisory Board may declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 1 beneficiaries, and the Executive Board may with the consent of the Supervisory Board declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 2 to 4 beneficiaries, at any time after the issue date of the respective tranche. In this case, the subscription rights shall be deemed vested upon receipt by the respective beneficiary of the corresponding declaration by the Executive Board or the Supervisory Board.

Subscription rights of each tranche can be exercised for the first time after their vesting and after expiration of the waiting period. The waiting period ends four years after the issue date of the tranche. The restriction of the exercise of the subscription rights to certain exercise periods and subject to compliance with all exercise conditions shall remain unaffected by the expiration of the waiting period.

The term of the subscription rights of every tranche starts on the issue date of the subscription rights and ends seven years after such issue date. Subscription rights that have not been exercised by the end of their term shall expire without compensation. This shall also apply where the non-exercise of the subscription rights is attributable to the fact that they could not be exercised, and shall also apply to vested subscription rights.

The subscription rights can only be exercised against payment of the exercise price to the Company. The exercise price for a subscription right of the respective tranche equals the non-volume weighted average stock exchange closing price of the shares of the Company on the ten stock exchange trading days preceding the issue date of the tranche in the electronic trading system of the Frankfurt Stock Exchange plus 10%.

After vesting has occurred and after the waiting period has expired, subscription rights may be exercised only if the closing stock exchange price of the shares of the Company in the electronic trading system of the Frankfurt Stock Exchange has exceeded the original price by at least 10% on at least one trading day in the period between the issue date of the tranche and the expiration of the waiting period (performance target). If the performance target has not been reached upon expiration of the waiting period, the subscription rights shall expire without compensation.

Any subscription rights of a beneficiary that have not yet vested shall expire without compensation upon termination of the service or employment contract between the beneficiary and the Company (or a subordinated Group company) if the service or employment contract has been terminated by the beneficiary, or by the Company (or the respective subordinated Group company) for cause. This shall not apply to any termination by group 1 or group 3 beneficiaries on account of a vote of no confidence by the General Shareholders' Meeting. Subscription rights of a beneficiary that have vested but have not yet been exercised or could not yet be exercised by the respective beneficiary shall expire without compensation upon termination of the service or employment contract between the beneficiary and the Company (or a subordinated Group company) if the service or employment contract has been terminated by the Company (or the respective subordinated Group company) for cause. This shall not apply to any termination by group 1 or group 3 beneficiaries on account of a vote of no confidence by the General Shareholders' Meeting.

[1] *With respect to the stock option programs, all figures, share prices and values are based on the Company's capital structure after the capital reduction in December 2020. For reasons of comparability, the applicable figures for 2019 have been adjusted. No adjustment was made in respect of the phantom stock program since all programs had expired as of the end of the reporting period.*

The Executive Board or, in the case of group 1 beneficiaries, the Supervisory Board, may reserve the right to fulfill subscription rights that have been validly exercised by paying to the beneficiary compensation in cash instead of delivering any newly issued or previously acquired treasury shares of the Company. Such cash compensation shall equal the difference between the exercise price and the closing price of the shares of the Company last determined in the electronic trading system of the Frankfurt Stock Exchange before the exercise of the subscription right. However, the Company has no obligation to offer cash compensation for exercised subscription rights and does not currently intend to offer such cash compensation for exercised subscription rights.

For further details on SOP 16–18, please see the invitation to the General Shareholders' Meeting on May 25, 2016. The document is available on the Company's website (www.epigenomics.com).

On May 30, 2017, the General Shareholders' Meeting resolved to implement a new stock option program (SOP 17–19) based on the new Conditional Capital XII (see also the section "Share Categories and Capital Structure"). Under this program, the Executive Board and the Supervisory Board of the Company were authorized, until the end of May 31, 2019, to issue stock options in accordance with the provisions set forth below to members of the Executive Board and to employees of the Company as well as to members of the management and to employees of domestic and foreign dependent companies of the Company provided that each stock option so issued entitles the beneficiary to subscribe for one non-par value registered share of the Company. Under this authorization, the Executive Board and the Supervisory Board may issue a total of up to 125,000 stock options which entitle the beneficiaries to subscribe for no more than 125,000 non-par value registered shares of the Company. Only the Supervisory Board of the Company is authorized to issue stock options to beneficiaries who are members of the Executive Board of the Company. In all other respects, the Executive Board is authorized to grant stock options, with the Executive Board being required to obtain the Supervisory Board's consent before granting stock options to holders of a general power of attorney (*Prokura*) of the Company and to members of the management of subordinated Group companies. The shareholders have no subscription rights.

The beneficiaries are the members of the Executive Board of the Company and members of the management of subordinated Group companies (group 1) and the employees of the Company and of subordinated Group companies (group 2). From the total volume of SOP 17–19, the distribution shall be as follows:

- Group 1 all beneficiaries: max. 68% or 85,000 stock options
- Group 2 all beneficiaries: max. 32% or 40,000 stock options

The subscription rights may only be exercised outside the blackout periods.

A quarter of the subscription rights in every tranche shall vest for the beneficiaries one year, two years, three years and four years, respectively, after the issue date of the respective tranche. In deviation from the above provision, the Supervisory Board may declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 1 beneficiaries, and the Executive Board may with the consent of the Supervisory Board declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 2 beneficiaries, at any time after the issue date of the respective tranche. In this case, the subscription rights shall be deemed vested upon receipt by the respective beneficiary of the corresponding declaration by the Executive Board or the Supervisory Board.

Otherwise, the same terms of SOP 16–18 apply to the term, exercise and expiration of the subscription rights under the SOP 17–19.

For further details on SOP 17–19, please see the invitation to the General Shareholders' Meeting on May 30, 2017. The document is available on the Company's website (www.epigenomics.com).

On May 15, 2019, the General Shareholders' Meeting resolved to implement a new stock option program (SOP 19-21) based on the new Conditional Capital XIII (see also the section "Share Categories and Capital Structure"). Under this program, the Executive Board and the Supervisory Board of the Company were authorized, until the end of May 31, 2021, to issue stock options in accordance with the provisions set forth below to members of the Executive Board and to employees of the Company as well as to members of the management and to employees of domestic and foreign dependent companies of the Company provided that each stock option so issued entitles the beneficiary to subscribe for one non-par value registered share of the Company. Under this authorization, the Executive Board and the Supervisory Board may issue a total of up to 125,000 stock options which entitle the beneficiaries to subscribe for no more than 125,000 non-par value registered shares of the Company. Only the Supervisory Board of the Company is authorized to issue stock options to beneficiaries who are members of the Executive Board of the Company. In all other respects, the Executive Board is authorized to grant stock options, with the Executive Board being required to obtain the Supervisory Board's consent before granting stock options to holders of a general power of attorney (*Prokura*) of the Company and to members of the management of subordinated Group companies. The shareholders have no subscription rights.

The beneficiaries are the members of the Executive Board of the Company and members of the management of subordinated Group companies (group 1) and the employees of the Company and of subordinated Group companies (group 2). From the total volume of SOP 19–21, the distribution shall be as follows:

- Group 1 all beneficiaries: max. 68% or 85,000 stock options
- Group 2 all beneficiaries: max. 32% or 40,000 stock options

Stock options from the SOP 19–21 may still be issued as of April 1, 2020, October 1, 2020 and April 1, 2021. The subscription rights may only be exercised outside the blackout periods.

A quarter of the subscription rights in every tranche shall vest for the beneficiaries one year, two years, three years and four years, respectively, after the issue date of the respective tranche. In deviation from the above provision, the Supervisory Board may declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 1 beneficiaries, and the Executive Board may with the consent of the Supervisory Board declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 2 beneficiaries, at any time after the issue date of the respective tranche. In this case, the subscription rights shall be deemed vested upon receipt by the respective beneficiary of the corresponding declaration by the Executive Board or the Supervisory Board.

Otherwise, the same terms of SOP 16–18 and SOP 17–19 apply to the term, exercise and expiration of the subscription rights under the SOP 19–21.

For further details on SOP 19–21, please see the invitation to the General Shareholders' Meeting on May 15, 2019 and the amended resolution proposals of the Executive Board and Supervisory Board. These documents are available on the Company's website.

40 Stock Option Programs – Outstanding Rights

No rights under SOP 16–18, 17–19 and 19–21 expired or were exercised with in the reporting year or in the previous year.

SOP 16–18 Option holder	Options outstanding as of Jan. 1, 2020 (2019)	Issued Options in 2020 (2019)	Forfeited Options in 2020 (2019)	Options outstanding as of Dec. 31, 2020 (2019)	Options exercisable as of Dec. 31, 2020 (2019)
Greg Hamilton (CEO)	28,436	0	0	28,436	11,447
	(28,436)	(0)	(0)	(28,436)	(0)
Albert Weber (EVP Finance)	3,750	0	0	3,750	0
	(3,750)	(0)	(0)	(3,750)	(0)
Other option holders	80,021	0	2,578	77,443	17,655
	(86,272)	(0)	(6,251)	(80,021)	(0)
All option holders	**112,207**	**0**	**2,578**	**109,629**	**29,102**
	(118,458)	(0)	(6,251)	(112,207)	(0)
Average exercise price (in EUR)	38.77	n/a	33.20	38.90	43.44
	(38.88)	(n/a)	(34.92)	(38.77)	(n/a)

SOP 17-19 Option holder	Options outstanding as of Jan. 1, 2020 (2019)	Issued Options in 2020 (2019)	Forfeited Options in 2020 (2019)	Options outstanding as of Dec. 31, 2020 (2019)	Options exercisable as of Dec. 31, 2020 (2019)
Greg Hamilton (CEO)	20,509	0	0	20,509	0
	(8,009)	(12,500)	(0)	(20,509)	(0)
Jorge Garces (COO)	21,250	0	0	21,250	0
	(10,625)	(10,625)	(0)	(21,250)	(0)
Albert Weber (EVP Finance)	17,500	0	0	17,500	0
	(8,750)	(8,750)	(0)	(17,500)	(0)
Other option holders	62,722	0	4,127	58,595	0
	(21,838)	(44,518)	(3,634)	(62,722)	(0)
All option holders	**121,981**	**0**	**4,127**	**117,854**	**0**
	(49,222)	(76,393)	(3,634)	(121,981)	(0)
Average exercise price (in EUR)	23.00	n/a	16.03	23.25	n/a
	(34.64)	(15.36)	(19.52)	(23.00)	(n/a)

SOP 19-21 Option holder	Options outstanding as of Jan. 1, 2020 (2019)	Issued Options in 2020 (2019)	Forfeited Options in 2020 (2019)	Options outstanding as of Dec. 31, 2020 (2019)	Options exercisable as of Dec. 31, 2020 (2019)
Greg Hamilton (CEO)	0 (0)	12,500 (0)	0 (0)	12,500 (0)	0 (0)
Jorge Garces (COO)	0 (0)	10,625 (0)	0 (0)	10,625 (0)	0 (0)
Albert Weber (EVP Finance)	0 (0)	8,750 (0)	0 (0)	8,750 (0)	0 (0)
Other option holders	0 (0)	35,853 (0)	4,925 (0)	30,928 (0)	0 (0)
All option holders	**0** (0)	**67,728** (0)	**4,925** (0)	**62,803** (0)	**0** (0)
Average exercise price (in EUR)	n/a (n/a)	20.00 (n/a)	20.00 (n/a)	20.00 (n/a)	n/a (n/a)

- As of the end of the reporting period, contractual commitments to a total of 55,000 further rights were made to members of the Executive Board and contractual commitments to 4,375 further rights were made to other option holders for award to them in 2021, provided they are available from the SOPs active at that time.
- Terms of outstanding stock options of all programs:

Term	Weighted average exercise price (in EUR) Dec. 31, 2020	Stock options issued and outstanding Dec. 31, 2020	Weighted average exercise price (in EUR) Dec. 31, 2019	Stock options issued and outstanding Dec. 31, 2019
2023	43.44	29,102	43.44	29,103
2024	40.80	54,444	40.80	54,531
2025	32.96	74,290	32.96	76,953
2026	15.36	69,647	15.36	73,621
2027	20.00	62,803	20.00	0
Total	**28.45**	**290,286**	**25.73**	**234,208**

41 Stock option programs – valuation parameters

The fair value of SOP 16–18 and SOP 17–19 was determined using the Monte Carlo simulation. It was assumed that the rights will be exercised in the fifth year after the grant date if the market price of the shares exceeds the exercise price of the stock option rights by more than 20% or in the sixth year after the grant date if the market price of the shares exceeds the exercise price of the stock option rights by more than 10%. An earlier exercise of the rights is not permitted under the program terms and conditions.

The following table gives detailed information on both programs active over the balance sheet date and the applied valuation parameters.

	SOP 16–18		SOP 17–19		SOP 19-21	
	Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2020	Dec. 31, 2019
Total number of outstanding options	109,629	112,207	117,854	121,981	62,803	0
of which vested until end of term	82,821	56,363	45,116	14,726	0	0
of which exercisable	29,102	0	0	0	0	0
Exercise prices (in EUR)	32.96-43.44	32.96-43.44	15.36-40.80	15.36-40.80	20.00	n/a
Weighted average term of outstanding rights in years	3.65	4.67	4.80	5.82	6.25	n/a
Weighted average fair value per option (EUR)	20.24	20.13	10.86	10.78	26.07	n/a
Applied share price volatility in %	84.31	84.31	80.46	80.38	76.01	n/a
Risk-free interest rate in %	-0.05	-0.04	-0.12	-0.12	-0.61	n/a
Assumed staff turnover in %	2.59	4.63	6.54	8.18	10.6	n/a
Expiry dates	Oct. 1, 2023 – Apr. 1, 2025	Oct. 1, 2023 – Apr. 1, 2025	Oct. 1, 2024 – Apr. 1, 2026	Oct. 1, 2024 – Apr. 1, 2026	Apr. 1, 2027	n/a

The risk-free interest rates are derived from the yield curve of German government bonds at the valuation date. The volatility of the share price can be derived from the historical volatility of the shares (in accordance with Bloomberg data) over the most recent past period equaling the remaining term of the rights. For adjustment purposes, a constant staff turnover was assumed based on the historical turnover of the Company's staff over the past four years. No dividend payments were assumed during the term of the rights (i.e., the assumed dividend yield was 0%).

42 Phantom Stock Programs – Description

The Company had four phantom stock programs (PSPs)/virtual share plans in place as an incentive scheme for management and staff by granting so-called phantom stock rights (PSRs) from such programs to the beneficiaries. The programs define a PSR as a conditional claim of its holder against the Company for a future payment in cash of a premium to the benefit of the holder. As PSRs will be settled in cash upon their exercise, the Company had to record a provision based on the fair values of the outstanding rights.

Phantom stock program 03–15 (PSP 03–15)

PSP 03–15 was established in 2013 to serve as a transformation tool for outstanding stock options at that time. Executive Board and Supervisory Board of the Company therefore had decided to offer PSRs from the PSP 03–15 to all stock option holders who were employees or members of the Executive Board at that time and to a dedicated number of former employees of the Company who still held stock options. For each stock option right returned to the Company in connection with an exchange offer, one PSR from PSP 03–15 was granted to its holder. Each PSR from PSP 03–15 became the legal successor of the returned stock option right then and was on equal terms with its economic value. Hence, the term of each PSR from PSP 03–15 equals the remaining term of the returned stock option right. These PSRs will expire without compensation at that point in time when the stock option right that has been returned in exchange would have expired. After the exchange of previously unvested stock option rights against PSRs, the vesting rules of the underlying SOPs applied equally with respect to the vesting of the PSRs. PSRs which were issued in exchange for vested stock options also vested immediately. Vested PSRs obtained in exchange for stock options from the SOP 06–10 can be exercised immediately. Vested PSRs obtained in exchange for stock options from SOP 09–13 and SOP 11–15 can only be exercised when the holding or waiting period of the stock options returned in exchange is or would have expired for its holder.

The exercise price of a PSR from PSP 03–15 equals the exercise price of the stock option right returned in exchange. The exercise of such a PSR simulates the exercise of the former stock option right in a so-called "ExerSale" transaction. Unlike the exercise of stock option rights, the holder of a PSR is not entitled to subscribe to a share of the Company by exercising a PSR. Upon the exercise of a PSR from PSP 03–15, the holder of the right obtains a claim against the Company for the payment of the PSR premium. The PSR premium is defined as the absolute difference between the then-current market price for Epigenomics shares and the exercise price of the PSR. Holders of PSRs are entitled to exercise their right during the exercise period when the strike price at the exercise date is higher than the base value. The strike price equals the arithmetic average of the Xetra closing rates for Epigenomics shares on the Frankfurt Stock Exchange on the five consecutive trading days prior to the exercise date. By exercising the PSR, the holder earns an entitlement to obtain the "PSR premium" from the Company. The PSR premium equals the absolute difference between strike price and base value of the right without any limitation. In contrast to the exercise of stock option rights, the exercise of PSRs is not compulsory subject to pre-defined exercise periods ("trading windows") and can be done at any time during the year. Nevertheless, the Executive Board and the Supervisory Board may stipulate compulsory exercise periods for holders of PSRs who are current employees of the Company. This applies in particular to holders of PSRs who are identified as "insiders" within the meaning of the German Securities Trading Act (*Wertpapierhandelsgesetz* – WpHG). It is left to the sole discretion of the Company's Executive Board to define and announce such exercise periods to the employees of the Company holding PSRs. Such exercise periods as determined by the Executive Board will then always apply simultaneously to the Executive Board members.

A takeover or a mandatory offer for the shares of the Company in accordance with the German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz* – WpÜG) entitles the holders of vested PSRs to exercise these rights in full. This also applies if the waiting period for these rights has not yet expired. The exercise right for the PSR holder shall apply only if the offered consideration consists solely of a cash settlement and if the bidder has gained control over the Company. In the event of a takeover, the PSR premium equals the difference between the cash amount which was finally offered to the shareholders as part of a takeover or a mandatory offer and the base value of the PSR.

Phantom stock program 2013 (PSP 2013), phantom stock program 2014 (PSP 2014), and phantom stock program 2015 (PSP 2015)

PSP 2013 was approved by the Executive Board and the Supervisory Board of the Company in May 2013. PSP 2014 was approved by the Executive Board and the Supervisory Board of the Company in May 2014. PSP 2015 was approved by the Executive Board and the Supervisory Board of the Company in September 2015 .

No further rights can be issued from PSP 2013, PSP 2014, and PSP 2015. The eligible beneficiaries of these programs were the members of the Executive Board and Group employees with an unterminated service or employment agreement with a Group company. The Executive Board decided on issuing PSRs from these programs to employees of the Company and to executives and employees of the subsidiaries. The Supervisory Board decided on issuing PSRs to the members of the Executive Board.

A certain number of PSRs granted to a beneficiary at a certain point in time is defined as a tranche. The PSRs of each tranche issued to beneficiaries who were not members of the Company's Executive Board at the issuance date started to vest from the beginning of the first full calendar quarter over the three years following their issuance in five equal parts, beginning with the first day of the fifth full calendar quarter after the issuance of the tranche. Thereafter, the further four of the five parts each vest after the end of the following four half-years. Thus, the last of the five parts vests after the last day of the twelfth full calendar quarter following issuance of the tranche and therefore at the end of a three-year waiting period. PSRs of each tranche can only be exercised after their vesting, but not before the end of the waiting period. The term of the PSRs begins with their issuance and ends five years after the beginning of their vesting period. Rights not exercised upon the end of their term expire without compensation. PSRs can generally be exercised at any time in the two years between the end of their waiting period and the end of their term ("exercise period"). Nevertheless, the Executive Board and Supervisory Board can stipulate adherence to timing restrictions in the exercise periods. This applies in particular to holders of rights who are identified by the Executive Board as an "insider" within the meaning of Section 15b WpHG. The Executive Board of the Company reserves the right to establish such timing restrictions in the exercise periods and to announce such restrictions in the exercise periods to rights holders who are employees of the Company at that date. Timing restrictions in exercise periods as announced by the Executive Board will always apply simultaneously to PSRs held by the Executive Board members themselves.

At the issuance of a PSR tranche, a so-called "base value" of the rights was determined. This base value equaled the average of the Xetra closing rates for Epigenomics shares on the Frankfurt stock exchange on the last five trading days before issuance. Holders of PSRs are entitled to exercise their right during the exercise period when the strike price at the exercise date is higher than the base value. The strike price equals the arithmetic average of the Xetra closing rates for Epigenomics shares on the Frankfurt Stock Exchange on the five consecutive trading days prior to the exercise date. By exercising the PSR, the holder earns an entitlement to obtain the "PSR premium" from the Company. The PSR premium equals the absolute difference between the strike price and the base value of the right up to a maximum of EUR 8.00 (PSP 2013), EUR 12.00 (PSP 2014), or EUR 15.00 (PSP 2015).

Any PSRs held by a beneficiary that have not yet vested expire without compensation upon termination of the service or employment agreement by the beneficiary or if the service or employment agreement has been terminated by the Company for cause. Any PSRs held by a beneficiary that have not yet vested shall remain valid if the Company terminates the service or employment agreement due to operational reasons. If the service or employment agreement is terminated by mutual consent, it is left to the sole discretion of the Executive Board or the Supervisory Board to decide whether those PSRs held by the beneficiary that have not yet vested at that point in time remain valid. If holders of vested PSRs leave the Company before the expiry date of those rights, they remain entitled to such vested rights until the expiry date. In such case, the strike price of their rights from PSP 2014 and PSP 2015 will be limited to the arithmetic average of the Xetra closing rates on the Frankfurt stock exchange on the five consecutive trading days prior to the final termination date of their employment agreement with the Company.

A takeover or a mandatory offer for the shares of the Company in accordance with the WpÜG entitles the holders of vested PSRs to exercise these rights in full. This also applies if the waiting period for these rights has not yet expired. The exercise right for the PSR holder will only apply if the offered consideration consists solely of a cash settlement and if the bidder has gained control over the Company. In the event of a takeover, the PSR premium equals the difference between the cash amount which was finally offered to the shareholders as part of a takeover or a mandatory offer and the base value of the PSR. However, the limitation of the PSR premium to EUR 8.00 (PSP 2013), EUR 12.00 (PSP 2014), and EUR 15.00 (PSP 2015) will still apply in such case.

43 Phantom Stock Programs – Outstanding Rights

No rights under the Company's PSPs were issued in the reporting year or in the previous year.

Phantom stock program 03–15 (PSP 03–15)

At the beginning of the previous year, other beneficiaries still held 20,000 rights under PSP 03–15 with an average base value of EUR 2.51 per right. All 20,000 rights expired during the course of 2019. The program was thereby terminated.

Phantom stock program 2013 (PSP 2013)

At the beginning of the previous year, other beneficiaries still held 23,000 rights under PSP 2013 with an average base value of EUR 6.19 per right. All 23,000 rights expired during the course of 2019. The program was thereby terminated.

Phantom stock program 2014 (PSP 2014)

No previously issued rights under PSP 2014 were forfeited or exercised either in the reporting year or in the previous year. The rights still outstanding as of the beginning of the previous year expired in 2019. The program was thereby terminated.

Beneficiaries	Reporting year	Rights held as of Jan. 1	expired	Rights held as of Dec. 31
Albert Weber (EVP Finance)	**2020**	**n/a**	**n/a**	**n/a**
	2019	30,000	30,000	n/a
Other beneficiaries	**2020**	**n/a**	**n/a**	**n/a**
	2019	224,833	224,833	n/a
Total	**2020**	**n/a**	**n/a**	**n/a**
	2019	254,833	254,833	n/a

Average base value (EUR/right)	**2020**	**n/a**	**n/a**	**n/a**
	2019	3.23	3.23	n/a

Phantom stock program 2015 (PSP 2015)

No previously issued rights under PSP 2015 expired or were exercised either in the reporting year or in the previous year. All rights still outstanding as of the beginning of the reporting year expired in 2020. The program was thereby terminated.

Beneficiaries	Reporting year	Rights held as of Jan. 1	expired	Rights held as of Dec. 31
Albert Weber (EVP Finance)	**2020**	**10,000**	**10,000**	**n/a**
	2019	10,000	0	10,000
Other beneficiaries	**2020**	**88,400**	**88,400**	**n/a**
	2019	88,400	0	88,400
Total	**2020**	**98,400**	**98,400**	**n/a**
	2019	98,400	0	98,400

Average base value (EUR/right)	**2020**	**5.05**	**5.05**	**n/a**
	2019	5.05	n/a	5.05

44 Phantom Stock Programs – Valuation Parameters

The fair value of all PSR was calculated by using the binomial approach based on the Cox-Ross-Rubinstein model. For PSP 03–15 it was assumed that the rights will be exercised after their waiting period if the market price of the shares exceeds the base value of the PSR by more than 10%. For PSP 2013, PSP 2014, and PSP 2015 it was assumed that the rights will be exercised in the fourth year after the grant date if the market price of the shares exceeds the base value of the PSR by more than 20% or in the fifth year after the grant date if the market price of the shares exceeds the base value of the PSR by more than 10%. An earlier exercise of the rights is not permitted under the program terms and conditions.

The following table gives detailed information on all programs and the applied valuation parameters.

PSP 2015	Dec. 31, 2020	Dec. 31, 2019
Total number of outstanding PSRs	0	98,400
of which vested until end of term	0	98,400
of which exercisable	0	98,400
Base value of PSR (in EUR)	n/a	5.05
Aggregate adjusted fair value of PSRs (in EUR thousand)	n/a	0
Aggregate maximum payments if PSRs are exercised (in EUR thousand)[1]	n/a	375
Weighted average term of outstanding rights (in years)	n/a	0.76
Weighted average fair value (EUR/PSR)	n/a	0.00
Applied share price volatility in %	n/a	38.58
Risk-free interest rate in %	n/a	-0.67
Assumed staff turnover in %	n/a	0.00
Expiry dates	n/a	Oct. 1, 2020

The risk-free interest rates are derived from the yield curve of German government bonds at the valuation date. The volatility of the share price can be derived from the historical volatility of the shares (in accordance with Bloomberg data) over the most recent past period equaling the remaining term of the rights. For adjustment purposes, a constant staff turnover was assumed based on the historical turnover of the Company's staff over the past three years. No dividend payments were assumed during the term of the rights (i.e., the assumed dividend yield was 0%).

The aggregate adjusted fair value of the rights granted under all programs amounted to EUR 0 thousand as of December 31, 2020 (December 31, 2019: EUR 0 thousand).

[1] The aggregate maximum payment to be made by the Company upon exercise of all outstanding rights under PSP 03–15 could not be calculated as the program did not provide for a cap on the PSR premium.

45 Information on the Executive Board and the Supervisory Board of the Company and their Remuneration

In the reporting year, the Company's Executive Board consisted of Greg Hamilton as Chief Executive Officer, Jorge Garces, Ph.D., as Chief Scientific Officer and Albert Weber as Executive Vice President Finance.

The remuneration of the members of the Company's Executive Board comprises a fixed and a variable component. The variable amount is determined on the basis of a variety of criteria, including the achievement of individual performance targets and Company performance targets, which are set by the Supervisory Board on a yearly basis. Apart from the fixed and the variable component, a third remuneration component consists of a long-term performance-based compensation in the form of stock options. In addition, the Executive Board members are beneficiaries of a D&O insurance policy with excess set at the statutory minimum amount. They also receive full reimbursement of their business travel expenses and other incidental benefits detailed in the remuneration report section of the Group management report 2020.

In 2020, total remuneration of the members of the Executive Board based on the benefits granted amounted to EUR 1,560 thousand (2019: EUR 2,031 thousand) and comprised:

EUR thousand	2020	2019
Fixed remuneration	1,019	1,302
One-year variable remuneration	446	460
Multi-year variable remuneration	95	269
Total remuneration (granted benefits)	**1,560**	**2,031**

The multi-year variable compensation of the Executive Board members in 2020 comprised 31,875 stock options (2019: 31,875).

Based on the allocations (cash payments), the total remuneration of the members of the Executive Board amounted to EUR 1,478 thousand (2019: EUR 1,966 thousand) and comprised:

EUR thousand	2020	2019
Fixed remuneration	1,018	1,302
One-year variable remuneration	460	664
Multi-year variable remuneration	0	0
Total remuneration (allocations)	**1,478**	**1,966**

In the event of a change of control, all Executive Board members have a special right to terminate their service agreements and would in such case be entitled to receive payment of their fixed remuneration for the remaining term of their service agreements. In no case will such payment exceed 150% of the severance payment cap in accordance with Recommendation G.13 of the German Corporate Governance Code 2020.

The Supervisory Board of the Company comprised the following members in the reporting period: Heino von Prondzynski, Einsiedeln (Switzerland) as Chairman, Dr. Ann Clare Kessler, Rancho Santa Fe, CA (U.S.A.), and Prof. Günther Reiter, Pfullingen (Germany) as Deputy Chairpersons, Dr. Helge Lubenow, Langenfeld/Rheinland (Germany), Franz Thomas Walt, Flims-Dorf (Switzerland) and, from June 2020, Alexander Link, Frankfurt am Main (Germany).

The remuneration structure for the Supervisory Board is based on an annual cash retainer ("fixed remuneration") and meeting-related payments ("variable remuneration"). The remuneration does not include any performance-related elements or long-term incentive components. In 2020, total remuneration of the members of the Supervisory Board amounted to EUR 263 thousand (2019: EUR 281 thousand) and comprised:

EUR thousand	2020	2019
Fixed remuneration	215	225
Variable remuneration	48	56
Total remuneration	**263**	**281**

Further details to the composition of the Executive Board and the Supervisory Board and details of the remuneration of their members in the reporting year can be found in the "Remuneration Report" section of the Group management report 2020.

46 Other Financial Obligations

EUR thousand	Term < 1 year	Term 1–5 years
Financial obligations from operating rental, lease, maintenance and service agreements	29	23
Financial obligations from manufacturing orders, inventories	354	0
Financial obligations from the purchase of goods and services	507	27
Total financial obligations	**890**	**50**

47 Information on the Company's Auditor Appointed by the General Shareholders' Meeting

At the Company's Annual General Shareholders' Meeting in June 2020, Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft was engaged to audit the Company's annual financial statements and consolidated financial statements for fiscal year 2020. During the reporting year, a total amount of EUR 143 thousand (2019: EUR 198 thousand) was expensed for miscellaneous services of this auditing firm for Epigenomics AG. Details are shown in the following table:

EUR thousand	2020	2019
Costs for audit services	143	118
Costs for other assurance services	0	80
Total	**143**	**198**

The costs disclosed for audit services relate to the audits of the separate financial statements of Epigenomics AG in accordance with German GAAP as well as the consolidated financial statements for the Epigenomics Group in accordance with IFRSs, and on reviews of the interim statements. The costs for other assurance services were incurred in connection with the Company's capital increase in November 2019.

48 Declaration of the Executive Board and the Supervisory Board of Epigenomics AG pursuant to section 161 AktG on the German Corporate Governance Code

In October 2020, the Executive Board and the Supervisory Board of the Company issued an updated declaration of compliance pursuant to section 161 of the German Stock Corporation Act (*Aktiengesetz* – AktG). The declaration was published on the Company's website *(www.epigenomics.com/news-investors/corporate-governance/)*.

49 Information on Other Transactions with Related Parties

As of the reporting date, the Company's liabilities due to members of its Executive Board amounted to EUR 2 thousand December 31, 2019: EUR 472 thousand) and liabilities due to members of its Supervisory Board amounted to EUR 22 thousand (December 31, 2019: EUR 32 thousand). There were no other transactions with related parties during the reporting year.

50 Report on Post-Balance Sheet Date Events

Announcement dated January 7, 2021

After the end of the reporting period, on January 7, 2021, we announced that the Executive Board, with the consent of the Supervisory Board, had resolved a subordinate mandatory convertible bond issue with an aggregate principal amount of up to EUR 5.5 million. The bonds may be converted into a total of up to 5 million registered no-par value shares of the Company representing a total interest in the Company's share capital of up to EUR 5 million.

The mandatory convertible bond issue (comprising up to 500,000 bonds with a principal amount of EUR 11.00 each) will initially be offered for subscription to existing Epigenomics AG shareholders by means of a rights offering at an issue price of EUR 11.00 per bond. The subscription period for the Company's shareholders began on January 13, 2021 and ended on January 27, 2021. The bonds are zero-coupon bonds and will mature on February 29, 2024. The bond terms include conversion rights for bondholders, as well as the obligation to convert all outstanding bonds not yet converted on February 29, 2024. Subject to any antidilutive adjustments, the conversion price will be EUR 1.10 per share and the conversion ratio 1:10. In other words, each bond can be converted into ten no-par value registered shares, each representing an interest in the Company's share capital of EUR 1.00.

Furthermore, we announced our plans to use the proceeds from the mandatory convertible bond issue to finance the Company's business operations. The primary purpose was to ease the sense of financial urgency following the final decision by the U.S. Centers for Medicare & Medicaid Services (CMS), which was pending at that time in connection with the reimbursement process for the Epi proColon colorectal cancer screening test in the U.S.A. (national coverage determination, NCD) and to reduce the short-term dependency on the capital market environment. The proceeds were also aimed at providing financial security should there be any delay in announcement of the CMS decision.

Announcement dated January 19, 2021

After the end of the reporting period, on January 19, 2021, we announced that CMS had issued a negative reimbursement decision in connection with the national coverage determination (NCD) for Epi proColon, Epigenomics' blood test for colorectal cancer screening. The Company is currently weighing up various options, including launching an appeal, taking legal action and/or pursuing other alternatives to secure CMS reimbursement. In a subsequent press release we also announced that – building on our expertise in blood testing and DNA methylation biomarkers – we have developed and validated a new test for CRC screening with clinical performance that meets the new coverage criteria specified in the final NCD.

Announcement dated January 27, 2021

After the end of the reporting period, on January 27, 2021, we announced that Dr. Jorge Garces, President and Chief Scientific Officer, would be leaving the Executive Board of Epigenomics AG as of January 31, 2021. Dr. Garces transitioned to an advisory role until the end of 2021 and will help the Company weigh up and implement strategic alternatives for its further development.

51 Approval for Publication

On March 12, 2021, the Executive Board cleared the consolidated financial statements for submission to the Supervisory Board. The Supervisory Board is tasked with reviewing the consolidated financial statements and stating whether it approves them. The consolidated financial statements and annual financial statements of Epigenomics AG, and the annual report, were approved at the Supervisory Board meeting on March 25, 2021 and published following the approval at the Supervisory Board meeting on March 24, 2021.

RESPONSIBILITY STATEMENT

To the best of our knowledge, and in accordance with the applicable accounting principles, the consolidated financial statements for 2020 give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the material opportunities and risks associated with the expected development of the Group.

Berlin, March 12, 2021

The Executive Board

Auditor's report

DISCLAIMER

This publication expressly or implicitly contains certain forward-looking statements concerning Epigenomics AG and its business. Such statements involve certain known and unknown risks, uncertainties and other factors which could cause the actual results, financial position, performance or achievements of Epigenomics AG to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Epigenomics makes this statement as of the date of this publication and does not intend to update the forward-looking statements contained herein as a result of new information, future events or otherwise.

Berlin, March 12, 2021
The Executive Board

INDEPENDENT AUDITOR'S REPORT

To Epigenomics AG, Berlin

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND THE GROUP MANAGEMENT REPORT

Audit opinions

We have audited the consolidated financial statements of Epigenomics AG and its subsidiary (the Group) – comprising the consolidated balance sheet as of December 31, 2020, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the fiscal year from January 1, 2020 through December 31, 2020 as well as the notes to the consolidated financial statements, including a summary of significant accounting methods. Furthermore, we have audited Epigenomics AG's group management report for the fiscal year from January 1, 2020 through December 31, 2020. In accordance with German legal requirements, we have not audited the statement on corporate governance and the compliance statement contained in the management report's section "Corporate Governance".

In our opinion, on the basis of the knowledge obtained in the audit,

- the attached consolidated financial statements comply, in all material respects, with the IFRS as adopted by the EU, and the additional requirements of German commercial law pursuant to Art. 315e Sec. 1 HGB (German Commercial Code) and provides, in compliance with these requirements, a true and fair view of the Group's assets, liabilities, and financial position as of December 31, 2020, and of its financial performance for the fiscal year from January 1, 2020 through December 31, 2020; and
- the attached group management report as a whole provides a true and fair view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of the Group's future development. Our audit opinion on the group management report does not cover the content of the aforementioned statement on corporate governance and the compliance statement.

Pursuant to Art. 322 Sec. 3 sentence 1 HGB, we declare that our audit has not led to any reservations relating to the consolidated financial statements' and the group management report's legal compliance.

Basis for the audit opinions

We have conducted our audit of the consolidated financial statements and of the group management report in accordance with Art. 317 HGB and the EU Audit Regulation (No. 537/2014, hereinafter referred to as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for the Audit of Financial Statements issued by the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer* "IDW"). Our responsibilities under these requirements and principles are further described in our audit opinion's section "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report". We are independent of the Group entities in accordance with the requirements pursuant to European law as well as German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance

with Article 10 Sec. 2 lit. f of the EU Audit Regulation, we declare that we have not provided any non-audit services prohibited under Article 5 Sec. 1 of the EU Audit Regulation. We believe the audit evidence we have obtained is sufficient and appropriate in order to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Material uncertainty in connection with the continuation as a going concern

Facts and problems

We refer to the disclosures "General Principles" in the notes to the financial statements and the disclosures in the section "Financial opportunities and risks" of the management report, where the legal representatives state that with a liquidity of EUR 4.5 million at the balance sheet date and a convertible bond in the amount of EUR 5.5 million placed in January 2021, the Company's continued existence as a going concern is ensured beyond the first quarter of 2022. Furthermore, it is stated that the Company's ability to continue as a going concern beyond this date is at risk without further capital measures. As stated in the disclosures in the management report's section "Financial opportunities and risks", these events and circumstances indicate the existence of a material uncertainty as it may cast significant doubt on the Company's ability to continue as a going concern and represents a going concern risk pursuant to Art. 322 Sec. 2 sentence 3 HGB. We have not modified our audit opinions with regard to this matter.

In our opinion, the corporate planning required and the clear and appropriate reporting in this respect present a high risk of material misstatement, which is why in our opinion this issue is of particular importance.

Audit approach and findings

As part of our audit, we considered whether the preparation of the consolidated financial statements on a going concern basis and the disclosures risks jeopardizing the Group's continued existence as a going concern in the notes to the consolidated financial statements and the Group management report are appropriate. The corporate planning presented to us has been approved by the Supervisory Board. We have checked the plausibility of this planning against the Company's development in recent years and the current cost structure. We also checked the planning for consistency and possible inconsistencies and discussed and critically reviewed the planning parameters with the Management Board. According to the results of our audit, the corporate planning is coherent and plausible and the planning parameters are realistic.

Key audit matters in the audit of the consolidated financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the fiscal year from January 1, 2020 through December 31, 2020. These matters have been taken into account in connection with our audit of the consolidated financial statements as a whole, and in forming our audit opinion related herewith; we do not express a separate audit opinion on these matters.

From our perspective, the following matters were of most significance during our audit:

- Revenue recognition
- Stock options

We have structured our presentation of these key audit matters as follows:

1.) Facts and problems

2.) Audit approach and findings

3.) Reference to further information

In the following, we will present these key audit matters:

Revenue recognition:

1. During the financial year, the Company recognized sales revenues in the amount of about EUR 0.84 million. Sales revenues are one of the most significant financial performance indicators in the capital market communication. These sales revenues include sales of the only main product in the amount of EUR 0.58 million, R&D revenues of EUR 0.23 million and license revenues in the amount of EUR 0.03 million. 51% of product sales are realized by sales to few major customers. To some extent, there are framework agreements with these customers which can be supplemented by further agreements. These agreements may be decisive as to whether a sale has been realized. An incomplete presentation of these additional agreements within the scope of revenue recognition poses a risk of material misstatements, which is why we believe this matter is of particular importance.

2. We have convinced ourselves from the correct recognition of sales by means of framework agreements, external confirmations as to possibly existing additional arrangements, proofs of delivery as well as the outgoing invoices and the related incoming payments. We could convince ourselves that any conditions additionally agreed upon with the major customers have been appropriately processed during the revenue recognition's assessment.

3. The Company's statements on the revenue recognition are contained in the consolidated financial statements' notes' section "Notes to the consolidated statement of comprehensive income (consolidated statement of profit and loss and other comprehensive income) – 1 Revenue".

Stock options:

1. As of the balance sheet date, stock option programs (AOP - "Equity settled share based payments") have been recognized in the Company's consolidated financial statements. During the reporting year, further commitments for AOPs have been granted to employees and board members. The AOPs are presented in the consolidated financial statements under the relevant expense positions (cost of sales, research and development costs as well as distribution and administration costs) as well as equity. An amount of EUR 0.6 million of AOPs has been recognized through profit and loss. The Company uses an external expert for the valuation of AOPs. From our perspective, share-based remuneration programs were of particular importance as the valuation depends to a major extent on the legal representatives' assessments and estimates and are thus afflicted by uncertainties.

2. Based upon the knowledge that estimated values provide for an increased risk of misstatements in the financial reporting and that the legal representatives' assessment decisions have a direct and clear impact on the consolidated financial statements, we have convinced ourselves from the valuation parameters' (such as risk-free rate and the shares' volatility) appropriateness by means of contract and company data and by involving a specialist's expertise and have assessed the new commitments' valuations' appropriateness. Based on that, we audited the accounting effect in the consolidated statement of

comprehensive income (consolidated statement of profit and loss and other comprehensive income) and in the consolidated balance sheet. The management board's underlying estimates and assessments made are within a reasonable range.

3. The Company's information on the stock option program is contained in the Notes to the Consolidated Financial Statements in section "Notes on share-based remuneration programs", "Stock-option programs – description", "Stock option programs – outstanding rights" and "Stock option programs – valuation parameters".

Other information

The executive directors are responsible for the other information. Other information comprises the following documents obtained by us prior to this audit opinion's date:

- Compliance statement in the section "Corporate Governance" of the 2020 Group Management Report,
- declaration on corporate governance in the section "Corporate Governance" of the 2020 Group Management Report,
- section "epi procolon®" in the 2020 annual report,
- the section "Foreword by the Executive Board" in the 2020 annual report,
- the Section "Our stock" in the 2020 annual report and
- section "Responsibility statement by the legal representatives" in the 2020 annual report.

The supervisory board is responsible for the following other information:

- Section "Report of the Supervisory Board" in the 2020 annual report.

Our audit opinions on the consolidated financial statements and on the group management report do not cover such other information, and consequently we do not express an audit opinion or any other form of audit conclusion thereupon.

In connection with our audit, our responsibility is to read the other information and, in doing so, to assess whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained during the audit; or
- otherwise seems to have been materially misstated.

Legal Representatives' and the Supervisory Board's Responsibilities for the Consolidated Financial Statements and the Group Management Report

The legal representatives are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Art. 315e Sec. 1 HGB and that the consolidated financial statements, in compliance with these requirements, provide a true and fair view of the Group's net assets, liabilities, financial position, and profit situation. Furthermore, the legal representatives are responsible for such internal controls they have deemed necessary in order to enable the preparation of consolidated financial statements that are free from material misstatements, whether due to fraud or error.

When preparing the consolidated financial statements, the legal representatives are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility to disclose, as applicable, matters related to the going concern principle. Furthermore, they are responsible for financial reporting on a going concern basis unless they intend to liquidate the Group or to discontinue business operations or in case there is no realistic alternative but to do so.

Furthermore, the legal representatives are responsible for the preparation of the group management report that, as a whole, provides a true and fair view of the Company's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. Furthermore, the legal representatives are responsible for such arrangements and measures (systems) they have considered necessary in order to enable the preparation of a group management report in accordance with the applicable German legal requirements and in order to be able to provide sufficient appropriate evidence for the statements made in the group management report.

The Supervisory Board is responsible for monitoring the Group's financial reporting process for the preparation of the consolidated financial statements and the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and the Group Management Report

Our objective is to obtain reasonable assurance as to whether the consolidated financial statements as a whole are free from material misstatements, whether due to fraud or error, and whether the group management report as a whole presents a true and fair view of the Group's position and is, in all material respects, consistent with the consolidated financial statements and the knowledge obtained during our audit, complies with German legal requirements and appropriately presents the opportunities and risks of the Group's future development, as well as to issue an audit report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit con-ducted in accordance with Art. 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for the Audit of Financial Statements promulgated by IDW will always detect any material misstatement. Misstatements can arise from fraud or error and are considered material if they, individually or in the aggregate, could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and the group management report.

We exercise professional judgment and maintain professional skepticism throughout the entire audit. We also:

- identify and assess the risks of material misstatements in the consolidated financial statements and the group management report, whether due to fraud or error, plan and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting any material misstatements resulting from fraud is higher than for those resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls;

- obtain an understanding of the internal control system relevant for the audit of the consolidated financial statements and of arrangements and measures relevant for the audit of the group management report, in order to plan audit procedures that are appropriate under the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems;
- evaluate the appropriateness of accounting methods applied by the legal representatives and the reasonableness of estimates made by the legal representatives as well as the related disclosures;
- draw conclusions on the appropriateness of the going concern principle applied by the legal representatives and, based on the audit evidence obtained, whether there is a material uncertainty in connection with events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that there is a material uncertainty, we are required to draw attention in the audit certificate to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our respective audit opinion. Our conclusions are based on the audit evidence obtained up to the date of our audit certificate. However, future events or conditions may cause the Group to cease to continue as a going concern;
- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements, in compliance with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Art. 315e Sec. 1 HGB, provide a true and fair view of the Group's net assets, financial position and profit situation;
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group in order to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions;
- evaluate the group management report's consistency with the consolidated financial statements, its conformity with German law, and its presentation of the Group's position;
- perform audit procedures on the prospective information presented by the legal representatives in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the legal representatives as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We discuss with those charged with governance, inter alia, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in the internal control system we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements and discuss with them all relationships and other matters that may reasonably be expected to affect our independence and, where applicable, the applied safeguards.

From the matters discussed with those charged with governance, we determine those matters that were of most importance in the audit of the current reporting period's consolidated financial statements and are therefore the key audit matters. We describe these matters in our audit certificate unless the matter's public disclosure should be precluded by any law or other regulation.

OTHER LEGAL AND REGULATORY REQUIREMENTS

Report on the Assurance in accordance with section 317 (3b) HGB on the Electronic Reproduction of the Consolidated Financial Statements on the Management Report Prepared for Publication Purposes

Audit opinion

Pursuant to Art. 317 Sec. 3b HGB, we have performed an audit in order to determine with reasonable assurance whether the reproductions of the consolidated financial statements and the Group management report (hereinafter also referred to as the "ESEF documents") contained in the attached file 12-03-2021-09-12_xbrl_file.zip (SHA256 hash value: 7134E10C4872A44C929DB7E75D855779E3CA9760CAEE1604DA7147D0977AD10B) and prepared for disclosure purposes comply in all material respects with the requirements pursuant to Art. 328 Sec. 1 HGB regarding the electronic reporting format ("ESEF format"). In accordance with German legal requirements, such audit extends only to the conversion of the information contained in the consolidated financial statements and the group management report into the ESEF format and therefore neither to the information contained in these reproductions nor to any other information contained in the aforementioned file.

According to our assessment, the reproductions of the consolidated financial statements and the group management report contained in the aforementioned attached file and prepared for disclosure purposes comply, in all material respects, with the electronic reporting format requirements pursuant to Art. 328 Sec. 1 HGB. We do not express an audit opinion on the information contained in these reproductions or on the other information contained in the above-mentioned file beyond the scope of this audit opinion and our audit opinions on the attached consolidated financial statements and the attached group management report for the fiscal year from January 1, 2020 to December 31, 2020 contained in the preceding "Report on the audit of the consolidated financial statements and the group management report".

Basis for our audit opinion

We conducted our audit of the reproductions of the consolidated financial statements and the group management report contained in the above-mentioned attached file in accordance with Art. 317 Sec. 3b HGB and in compliance with the draft IDW Auditing Standard: Audit of Electronic Reproductions of Financial Statements and Management Reports Prepared for the Purpose of Disclosure pursuant to Art. 317 Sec. 3b HGB (IDW EPS 410). Our responsibility in accordance with such standard is further described in the section "Auditor's Responsibility for the Audit of the ESEF Documents". Our auditing practice complies with the quality assurance system requirements of the IDW Quality Assurance Standard: Requirements to Quality Assurance in Auditing Practice (IDW QS 1).

Legal Representative's and Supervisory Board's responsibilities for the ESEF documents

The Company's legal representatives are responsible for the preparation of the ESEF documents containing the electronic reproductions of the consolidated financial statements and the group management report in

accordance with Art. 328 Sec. 1 sentence 4 no. 1 HGB and for the certification of the consolidated financial statements in accordance with Art. 328 Sec. 1 sentence 4 no. 2 HGB.

Furthermore, the legal representatives are responsible for such internal controls they have deemed necessary in order to enable the preparation of the ESEF documents that are free from any material non-compliance, whether due to fraud or error, with the provisions pursuant to Art. 328 Sec. 1 HGB regarding the electronic reporting format.

The Company's legal representatives are also responsible for submitting the ESEF documents together with the audit certificate and the attached audited consolidated financial statements and audited group management report as well as other documents to be disclosed to the operator of the Federal Gazette.

The Supervisory Board is responsible for monitoring the preparation of the ESEF documents as part of the reporting process.

Auditor's responsibilities for the audit of the ESEF documents

Our objective is to obtain reasonable assurance as to whether the ESEF documents are free from any material non-compliance, whether due to fraud or error, with the requirements pursuant to Art. 328 Sec. 1 HGB. We exercise professional judgment and maintain professional skepticism throughout the entire audit. We also:

- identify and assess the risks of material non-compliance with the requirements pursuant to Art. 328 Sec. 1 HGB, whether due to fraud or error, plan and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinion;
- obtain an understanding of the internal controls relevant for the audit of the ESEF documents in order to plan audit procedures that are appropriate under the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these controls;
- assess the technical validity of the ESEF documents, i.e. whether the file containing the ESEF documents complies with the requirements of Delegated Regulation (EU) 2019/815 as amended at the reporting date regarding the technical specification for this file;
- assess whether the ESEF documents allow a consistent XHTML reproduction of the audited consolidated financial statements and the audited group management report;
- assess whether the markup of ESEF documents with inline XBRL technology (iXBRL) provides an adequate and complete machine-readable XBRL copy of the XHTML reprodcution.

Further information pursuant to Article of the 10 EU Audit Regulation

We were elected as group auditors by the Annual General Meeting on June 12, 2020. We were engaged by the Supervisory Board on July 27, 2020. We have served as Epigenomics AG's group auditors without interruption since the fiscal year 2015.

We declare that the audit opinions contained in this audit certificate are consistent with the additional report to the audit committee pursuant to Article 11 EU Audit Regulation (audit report).

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The auditor responsible for the audit is Andreas Weissinger.

Munich, dated March 12, 2021

Baker Tilly GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft
(Düsseldorf)

Hund
German CPA

Weissinger
German CPA

Audited Consolidated Financial Statements of Epigenomics AG Prepared in Accordance with IFRS as of and for the financial year ended December 31, 2019

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME) FOR THE PERIOD FROM JANUARY 1 TO DECMEBR 31

EUR thousand	Note	2018	2019
Revenue	1	1,533	1,125
Cost of sales	3	-440	-253
Gross profit		1,093	872
Gross margin (in %)		*71.3*	*77.5*
Other income	2	1,441	2,488
Research and development costs	3	-6,418	-7,340
Selling, general and administrative costs	3	-8,703	-8,935
Other expenses	3.6	-308	-1,758
Operating result/earnings before interest and taxes (EBIT)	7	-12,895	-14,673
Interest income	8	17	172
Interest expenses	8	-550	-63
Other financial result	8	-2	-2
Net loss for the year before taxes on income		-13,430	-14,566
Taxes on income	9	738	-2,454
Net loss for the year		-12,692	-17,020
Items that may be reclassified to profit or loss:			
Exchange differences on translation of foreign operations	23	-321	-147
Changes in fair value of financial instruments measured at fair value through other comprehensive income	23	-252	228
Other comprehensive income for the year		-573	81
Total comprehensive income for the year		-13,265	-16,939
Earnings per share (basic and diluted, in EUR)	*10*	*-0.47*	*-0.46*

CONSOLIDATED BALANCE SHEET AS OF DECEMBER 31

ASSETS EUR thousand	Note	Dec. 31, 2018	Dec. 31, 2019
Non-current assets			
Intangible assets	11	474	333
Property, plant and equipment	12	701	1,533
Deferred taxes	14	2,378	0
Total non-current assets		3,553	1,866
Current assets			
Inventories	15	364	313
Trade receivables	16	164	89
Marketable securities	17	653	880
Cash and cash equivalents	18	16,487	10,155
Other current assets	19	606	686
Total current assets		18,274	12,123
Total assets		21,827	13,989

EQUITY AND LIABILITIES EUR thousand	Note	Dec. 31, 2018	Dec. 31, 2019
Equity			
Subscribed capital	20	36,022	43,528
Capital reserve	21	68,802	69,251
Retained earnings	22	-73,115	-85,807
Net loss for the year		-12,692	-17,020
Other comprehensive income	23	-404	-323
Total equity		18,613	9,629
Non-current liabilities			
Lease liabilities		0	697
Provisions	25	47	44
Total non-current liabilities		47	741
Current liabilities			
Trade payables	26	1,411	1,430
Lease liabilities		0	216
Deferred income		23	5
Other liabilities	27	771	1,368
Provisions	25	962	600
Total current liabilities		3,167	3,619
Total equity and liabilities		21,827	13,989

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD FROM JANUARY 1 TO DECEMBER 31

EUR thousand	Note	2018	2019
Cash and cash equivalents at the beginning of the year		12,826	16,487
Operating activities			
Net loss for the year		-12,692	-17,020
Adjustments for:			
Stock option expenses	4	1,151	873
Amortization of intangible assets	5, 11	196	319
Depreciation of property, plant and equipment	5, 12	112	194
Losses from the disposal of non-current assets	6	0	1
Foreign currency exchange results		-4	25
Financial income	8	-18	-172
Financial expenses	8	552	65
Taxes	9	-738	2,454
Operating result before changes in operating assets and liabilities		-11,441	-13,261
Changes in operating assets and liabilities:			
Inventories	15	-66	45
Trade receivables	16	782	84
Other assets	19	1,297	-77
Non-current and current provisions	25	-147	-364
Trade payables and other liabilities	26, 27	-776	118
Deferred income		23	-17
Tax paid		-23	-34
Cash flow from operating activities	31	-10,351	-13,506

EUR thousand	Note	2018	2019
Investing activities			
Payments to acquire intangible assets		-15	-47
Payments to acquire property, plant and equipment		-91	-75
Payments related to capitalized development costs		0	0
Proceeds from investment grants received	12	813	0
Interest received	8	17	169
Cash flow from investing activities	**32**	**724**	**47**
Financing activities			
Proceeds from the issue of new shares	20, 21	21,253	8,332
Payments for the issue of new shares	21	-1,958	-983
Payments for the issue of convertible notes		-1	0
Payments for the redemption of convertible notes		-6,020	0
Payments for leases		0	-229
Cash flow from financing activities	**33**	**13,274**	**7,120**
Net cash flow		**3,647**	**6,339**
Currency translation effects		14	7
Cash and cash equivalents at the end of the year		**16,487**	**10,155**

As of the balance sheet date, EUR 86 thousand of cash and cash equivalents included restricted cash.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY AS OF DECEMBER 31

EUR thousand	Note	Subscribed capital	Capital reserve	Retained earnings	Net loss for the year	Other comprehensive income	Group equity
Dec. 31, 2017		24,014	59,509	-62,880	-10,235	169	10,577
Total comprehensive income 2018	23	0	0	0	-12,692	-573	-13,265
Transfer of net loss for the year 2017 to retained earnings		0	0	-10,235	10,235	0	0
Capital increase with subscription rights	20	11,427	0	0	0	0	11,427
Premium from the capital increase with subscription rights	20, 21	0	9,827	0	0	0	9,827
Capital increase through contribution in kind		581	0	0	0	0	581
Premium from the capital increase through contribution in kind		0	485	0	0	0	485
Costs for the creation of new shares	21	0	-2,170	0	0	0	-2,170
Stock option expenses	4, 21	0	1,151	0	0	0	1,151
Dec. 31, 2018		36,022	68,802	-73,115	-12,692	-404	18,613
Total comprehensive income 2019	23	0	0	0	-17,020	81	-16,939
Transfer of net loss for the year 2018 to retained earnings		0	0	-12,692	12,692	0	0
Capital increase with subscription rights	20	7,506	0	0	0	0	7,506
Premium from the capital increase with subscription rights	20, 21	0	826	0	0	0	826
Costs for the creation of new shares	21	0	-1.250	0	0	0	-1.250
Stock option expenses	4, 21	0	873	0	0	0	873
Dec. 31, 2019		43,528	69,251	-85,807	-17,020	-323	9.629

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

BASIC INFORMATION, PRINCIPLES AND METHODS

DESCRIPTION OF BUSINESS ACTIVITY

Epigenomics ("Epigenomics", the "Group" or the "Company") was founded as a limited liability company under German law (*Gesellschaft mit beschränkter Haftung* – GmbH) in 1998 and has its registered office in Berlin, Germany. In 2000, the Company was converted into a stock corporation under German law (*Aktiengesellschaft* – AG) and entered into the commercial register (*Handelsregister*) of Charlottenburg under HRB 75861. It has been listed in the Prime Standard segment of the Frankfurt Stock Exchange since July 19, 2004 (ticker symbol: ECX).

In accordance with its Articles of Association, the object of the Company is the development and marketing of procedures and devices for the production in quantity of particular epigenetic parameters such as DNA methylation patterns as well as the information technology bases necessary for their procurement and evaluation. Epigenomics AG is a molecular diagnostics company developing and commercializing a pipeline of proprietary products for screening, early detection and diagnosis of cancer. The Company's products enable doctors to diagnose cancer earlier and more accurately, leading to improved outcomes for patients.

GENERAL PRINCIPLES

The consolidated financial statements of Epigenomics AG have been prepared in accordance with Section 315e of the German Commercial Code (*Handelsgesetzbuch* – HGB) and in application of the International Financial Reporting Standards (IFRSs) of the International Accounting Standards Board (IASB), London, in effect as of the December 31, 2019 balance sheet date, as adopted by the European Union (EU).

The Company has incurred accounting losses of EUR 85,807 thousand since being founded. The Company generated a net loss of EUR 17,020 thousand for 2019 (2018: EUR 12,692 thousand). The "going concern" principle in accordance with IAS 1.25 *Presentation of Financial Statements* was applied. The Company has liquid funds (cash, cash equivalents and marketable securities) of EUR 11.0 million at the end of 2019. Without further capital measures and/or cost reduction programs in 2020 or at the beginning of 2021, the continued existence of the Company as a going concern beyond the beginning of 2021 is at risk (material uncertainty). After the end of the reporting period, on March 31, 2020, such a measure was already implemented with the successful placement of new shares in the context of a 10% capital increase with generated net proceeds of EUR 3.6 million. On the basis of our experience from the past years and in assessment of the further developments in our business environment and the capital markets, we assume that we will be able to implement further necessary capital and cost reduction measures successfully in a timely manner.

The Consolidated Statement of Comprehensive Income (Consolidated Statement of Profit or Loss and Other Comprehensive Income) has been prepared using the cost of sales method.

REPORTING PERIOD, REPORTING CURRENCY, AND ROUNDING

The reporting period (comparative period) as defined in these consolidated financial statements is the period from January 1 to December 31, 2019 (2018). The reporting currency is the euro (EUR). Many figures are rounded to the nearest thousand euros, which may give rise to rounding differences in the figures presented in these notes.

SCOPE OF CONSOLIDATION

The consolidated Group consists of Epigenomics AG as the parent company (registered office: Geneststrasse 5, 10829 Berlin, Germany) and Epigenomics, Inc., as its sole subsidiary during the reporting period. The subsidiary is registered in the U.S. state of Washington and since the reporting year has based its operations out of San Diego (11055 Flintkote Ave, Suite A, San Diego, CA 92121). Epigenomics AG held 100% of the share capital and the voting rights of Epigenomics, Inc. between January 1, 2018 and December 31, 2019.

For the reporting year and the previous year, the two companies each prepared separate financial statements which were either audited or reviewed, independent of their inclusion in the consolidated financial statements.

PRINCIPLES OF CONSOLIDATION

In acquisition accounting, the carrying amount of the investment is offset against the share of equity of the subsidiary attributable to the parent as at the date of acquisition. Any resulting difference is added to the assets and liabilities in the amount in which their market value deviates from their carrying amount at the time of the initial consolidation. Any amount in excess is recognized as goodwill.

All intercompany transactions and interim results, income and expenses, profits and losses, receivables and payables are eliminated in full on consolidation.

APPLICATION OF NEW AND REVISED IFRSs AND INTERPRETATIONS AND EFFECTS ON THE COMPANY'S CONSOLIDATED FINANCIAL STATEMENTS FOR FISCAL YEAR 2018

In the reporting year, the Group for the first time applied the following new and amended IFRSs and Interpretations issued by the IASB and endorsed by the EU that are effective for accounting periods beginning on or after January 1, 2019. Generally, the new standards and amendments mentioned below require prospective application.

IFRS 16 Leases (endorsed by the EU on October 31, 2017)

The new IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessees and lessors. Upon its effective date it superseded IAS 17 *Leases*, IFRIC 4 *Determining Whether an Arrangement Contains a Lease*, SIC-15 *Operating Leases – Incentives* and SIC-27 *Evaluating the Substance of Transactions in the Legal Form of a Lease*. IFRS 16 makes significant changes to lessee accounting. It removes the distinction between operating and finance leases under IAS 17 and instead requires a lessee to recognize a right-of-use asset and a lease liability at lease commencement for all leases, except for short-term leases and leases of low value assets. A lessee can apply IFRS 16 either by means of a full retrospective approach or a modified retrospective approach. If the latter approach is selected, an entity is not required to restate the comparative information and the cumulative effect of initially applying IFRS 16 must be presented as an adjustment to opening retained earnings (or other component of equity as appropriate).

The application of IFRS 16 impacted the Company's financial statements in fiscal year 2019. The Company elected to apply the modified retrospective approach on initial application and exercises the recognition exemptions for short-term leases or leases of low-value assets. As a result of this new standard on leases, the Company's rental agreements for office premises at its locations in Berlin and San Diego are no longer recognized as off-balance sheet obligations, but rather as balance sheet liabilities effective January 1, 2019 and April 1, 2019, respectively. Accordingly, the rental agreements were recognized as non-current assets (right-of-use assets) on the basis of the applicable contractual situations and parameters. The total net value of these right-of-use assets amounted to EUR 877 thousand as of the reporting date. The figure includes the contractual options for the Company to extend the term of the leases. This caused an increase in total assets and a decrease in the equity ratio in the reporting period. Amortization and impairment, as well as the interest expense on the affected leases is now recognized in other comprehensive income as opposed to the previous method of recognizing the lease expense, which has caused a slight improvement in EBIT, EBITDA, and EBITDA before share-based payment expenses. The depreciation expense amounted to EUR 202 thousand in 2019 and the associated interest expense amounted to EUR 63 thousand. Aside from these commercial leases, the Company has no other lease agreements in place that are affected by IFRS 16.

IFRIC 23 Uncertainty over Income Tax Treatments (endorsed by the EU on October 23, 2018)

The new IFRIC 23 clarifies the accounting for uncertainties in income taxes. The interpretation is to be applied to the determination of taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates, when there is uncertainty over income tax treatments under IAS 12. IFRIC 23 was endorsed by the EU on October 23, 2018.

Applying IFRIC 23 did not have any effect on the Company's financial statements in fiscal year 2019. Nor are any effects currently expected in future fiscal years.

Amendments to IFRS 9 Prepayment Features wuth Negative Compensation (endorsed by the EU on March 22, 20218)

The Amendments to IFRS 9 contain on the one hand changes regarding symmetric prepayment options. These amend the existing requirements in IFRS 9 regarding termination rights in order to allow measurement at amortized cost (or, depending on the business model, at fair value through other comprehensive income) even in the case of negative compensation payments. On the other hand, the amendments clarify that the carrying amount of a financial liability is immediately recognized in profit or loss following modification or exchange. A retrospective change of the accounting treatment may therefore become necessary if in the past the effective interest rate was adjusted and not the amortized cost amount. The Amendments to IFRS 9 were endorsed by the EU on March 22, 2018.

Applying the Amendments to IFRS 9 did not have any effect on the Company's financial statements in fiscal year 2019. Nor are any effects currently expected in future fiscal years.

Amendments to IAS 19 Plan Amendment, Curtailment or Settlement (endorsed by the EU on March 13, 2019)

In the event a defined benefit plan is amended, curtailed or settled, the Amendments to IAS 19 require an entity to determine the current service cost and net interest for the remainder of the fiscal year using the same updated actuarial assumptions used to remeasure the net defined benefit liability. In addition, the amendments clarify the effect of a plan amendment, curtailment or settlement on the requirements regarding the asset ceiling.

Applying the Amendments to IAS 19 did not have any effect on the Company's financial statements in fiscal year 2019. Nor are any effects currently expected in future fiscal years.

Amendments to IAS 28 Long-term Interests in Associates and Joint Ventures (endorsed by the EU on February 8, 2019)

The Amendments to IAS 28 clarify that an entity applies IFRS 9, including its impairment requirements, to long-term interests in an associate or joint venture that form part of the net investment in the associate or joint venture but to which the equity method is not applied. In addition, paragraph 41 was deleted.

Applying the Amendments to IAS 28 did not have any effect on the Company's financial statements in fiscal year 2019. Nor are any effects currently expected in future fiscal years.

Annual Improvements to IFRS Standards (2015–2017 Cycle) (endorsed by the EU on March 14, 2019)

The Annual Improvements to IFRS Standards (2015–2017 Cycle) include amendments to IFRS 3 *Business Combinations*, IFRS 11 *Joint Arrangements*, IAS 12 *Income Taxes*, and IAS 23 *Borrowing Costs*. The Amendments to IFRS 3 clarify that an entity must remeasure its previously held interest in a joint operation when it obtains control of the business. The Amendments to IFRS 11 clarify that an entity does not remeasure its previously held interest in a joint operation when it obtains joint control of the business. The Amendments to IAS 12 clarify that all income tax consequences of dividend payments must be accounted for in the same way. The Amendments to IAS 23 clarify that if any borrowing used to develop an asset remains outstanding after the related qualifying asset is ready for its intended use or sale, that borrowing becomes part of the funds that an entity borrows generally when calculating the capitalization rate on general borrowings.

Applying the Annual Improvements to IFRS Standards (2015–2017 Cycle) did not have any effect on the Company's financial statements in fiscal year 2019. Nor are any effects currently expected in future fiscal years.

Mandatory application for fiscal years beginning on or after January 1, 2020:

Amendments to IFRS 3 Definition of a Business (not yet endorsed by the EU)

The Amendments to IFRS 3 are intended to resolve the problems that arise when an entity determines whether it has acquired a business or a group of assets. Such problems may arise due to the fact that the accounting requirements for goodwill, acquisition costs and deferred taxes differ on the acquisition of a business and on the acquisition of a group of assets.

The Company does not expect that the application of the Amendments to IFRS 3 will have any effect on its financial statements for fiscal years from 2020 onward.

Amendments to IAS 1 and IAS 8 Definition of Material (endorsed by the EU on November 29, 2019)

The Amendments to IAS 1 and IAS 8 clarify the definition of "material" and align the definition used in the Conceptual Framework and the standards themselves.

The Company does not expect that the application of the Amendments to IAS 1 and IAS 8 will have any effect on its financial statements for fiscal years from 2020 onward.

Amendments to IFRS 9, IAS 39 and IFRS 7 Interest Rate Benchmark Reform (endorsed by the EU on January 15, 2020)

The amendments to IFRS 9, IAS 39 and IFRS 7 were necessitated by capital market developments that have brought into question the long-term viability of the established interest reference rates currently in use (e.g., LIBOR). Firstly, they modify specific hedge accounting requirements so that entities apply those hedge accounting requirements assuming that the interest rate benchmark on which the hedged cash flows and cash flows from the hedging instrument are based will not be altered as a result of interest rate benchmark reform. Secondly, the amendments will be mandatory for all hedging relationships that are affected by the interest rate benchmark reform. In addition, they require specific disclosures about the extent to which entities' hedging relationships are affected by the amendments.

The Company does not expect that the application of the Amendments to IFRS 9, IAS 39 and IFRS 7 will have any effect on its financial statements for fiscal years from 2020 onward.

Revisions to Conceptual Framework for Financial Reporting in accordance with IFRSs (endorsed by the EU on November 29, 2019)

The new Conceptual Framework includes revised definitions of an asset and a liability as well as new guidance on measurement and derecognition, presentation and disclosure. These revisions result in amendments to multiple standards and interpretations that refer to the Conceptual Framework.

The Company does not expect that the Revisions to Conceptual Framework for Financial Reporting in accordance with IFRSs will have any effect on its financial statements for fiscal years from 2020 onward.

Mandatory application for fiscal years beginning on or after January 1, 2022:

IFRS 17 Insurance Contracts (not yet endorsed by the EU)

The new IFRS 17 establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts within the scope of the standard. The objective of IFRS 17 is to ensure that a reporting entity provides relevant information and faithfully represents those contracts.

The Company does not expect that the application of the Amendments to IFRS 17 will have any effect on its financial statements for fiscal years from 2022 onward.

MANAGEMENT'S JUDGMENT, ASSUMPTIONS AND EXPECTATIONS

The management of the Company has made several judgments in the process of applying the entity’s accounting policies that have a significant effect on the amounts recognized in the financial statements. Those judgments concern the capitalization of development costs and the recognition of deferred taxes. The judgments are described for each relevant position in the enumeration of accounting and valuation principles.

Management’s expectations on the future are usually based on the current economic outlook according to the consensus prognoses by leading economic and financial research institutions and independent analysts. Due to the worldwide development in connection with the spread of the corona virus after the end of the reporting period, it is hardly possible to assess the further economic conditions and the consequences of this crisis. It can only be stated that the global economic situation will deteriorate significantly and negative effects will be felt in almost all areas and at all companies.

The plans of the Group’s management do not expect Epigenomics to be highly dependent on the overall economic situation in the short term. The Group’s operating activities are furthermore not highly dependent on the availability of or the price development for commodities or industrial supplies but rather on the individual situation of the Company and its opportunities to continue its operations by further financing transactions. Therefore, the Company is still dependent on the condition and the development of the capital markets (mainly in the U.S.A. and in Germany), particularly with regard to the life sciences industry. Additionally, the Company is strongly dependent on inclusion in the guidelines issued by medical professional societies and the reimbursement decisions by the payors in the healthcare system of the U.S.A. with regard to its lead product – Epi proColon, and subsequently on the commercial success of this product. The Company's strategy going forward assumes positive reimbursement decisions in 2020 and the years to come.

The economic conditions in Germany and the U.S.A. will be in 2020 and potentially also in the following years significantly influenced by the aforementioned corona crisis. Also, effects on tax policies in these countries cannot be ruled out either temporarily or permanently, but cannot be predicted at present either with respect to their nature and scope or with respect to their relevance for Epigenomics. No significant changes that would affect the Company in regulatory requirements in the countries that the Company primarily exports to, are anticipated currently in the coming year.

All of the Company's future scenarios furthermore assume essentially unrestricted access to the relevant clinical and biological samples, corresponding clinical data and sufficient resources for the execution of the Company’s commercial projects.

In the short- to medium-term, the Company expects the EUR/USD exchange rate to hover around the rate at the end of 2019, although it will remain susceptible to more pronounced fluctuations as a reaction to key global economic and geopolitical events. Management's plans for 2020 are based on an average exchange rate of EUR/USD 1.10. It also took note of the predictions of financial experts and banks as of the date on which the budget was drawn up.

The preparation of the consolidated financial statements in accordance with IFRSs requires, in the case of several items, that assumptions or estimates be made that affect the carrying amounts in the consolidated balance sheet and/or the amounts recognized in the consolidated statement of comprehensive income (consolidated statement of profit or loss and comprehensive income). This also applies to the presentation of contingent assets and liabilities. The actual amounts may vary from these assumptions and estimates.

Determining the useful life of capitalized development costs of the Company's products requires a long-term estimation of the market approval timelines for the products, their market acceptance and/or the speed of their market penetration, regulatory developments in key markets, the timing and the extent of reimbursement decisions, and competition just to name some of the most important parameters. Particularly for novel products like blood-based cancer tests there are no empirical values and less experience available, which makes any estimations difficult. The Group’s management closely observes developments on the key markets and regularly reviews its own projections. Reaching or not reaching a milestone – like a market approval decision – will therefore lead to remeasurements which may possibly be decisive for a change of the previously assumed useful lives.

In particular, further assumptions and estimates are required for:

- determining the useful lives of other property, plant and equipment and non-current intangible assets,
- determining whether the criteria for the capitalization of development costs and the recoverability of internally generated intangible assets are met,
- testing assets for impairment (particularly regarding intangible assets),
- applicable incremental borrowing interest rate to determine the net present value of the leasing liabilities
- assessing the possible exercise of contractual extension options,
- determining the terms of in-licensed intellectual property rights,
- determining if deferred taxes are realizable,

- determining whether financial instruments are to be classified as measured at amortized cost, fair value through other comprehensive income, or fair value through profit or loss,
- determining the fair value of financial instruments,
- setting the parameters regarding the measurement of share-based payment instruments, and
- accounting for provisions (particularly the determination of the likelihood of occurrence).

ACCOUNTING AND VALUATION PRINCIPLES

Fair value measurement

These consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at revalued amounts or their fair values at the end of each reporting period.

For determining and disclosing the fair value of financial instruments, the Company uses the following hierarchy in accordance with IFRS 13 *Fair Value Measurement*:

Level 1: Quoted (unadjusted) prices in active markets for identical assets or liabilities

Level 2: Inputs other than quoted prices included within level 1 that are observable for assets or liabilities, either directly (as prices) or indirectly (derived from prices)

Level 3: Inputs for assets or liabilities that are not based on observable market data (unobservable inputs)

The carrying amounts of financial assets and liabilities such as cash and cash equivalents, marketable securities, trade receivables, trade payables, convertible notes and other current liabilities approximate their fair values due to their short-term maturities. The fair value of marketable securities is based on quoted market prices (level 1). There were no transfers between level 1 and level 2 fair value measurements, and no transfers into or out of level 3 fair value measurements during the reporting period.

Revenue recognition

Revenue from contracts with customers is recognized for the sale of goods and property rights (e.g., patents) or the rendering of other services when the customer obtains the control of the distinct goods or service and the customer has the ability to direct the use of and obtain the benefits from the goods or services received. The revenue recognized is the amount of the consideration that the entity would expect to be entitled to in exchange for these goods or services. If a contract includes a series of distinct goods or services, the transaction price is allocated to each performance obligation on the basis of the respective stand-alone selling price. If a stand-alone selling price is not directly observable, the entity reasonably estimates the stand-alone selling price. Revenue is recognized for each performance obligation either at a specific point in time or over a specific period of time.

Non-refundable prepayments received for delivering goods or performing services in the future are deferred and subsequently recognized as revenue when the goods are delivered or the services performed. Optional prolongation terms are considered individually in accordance with the underlying exercise conditions and anticipated likelihood of their exercise.

License revenue is generated by granting third parties exclusive and non-exclusive licenses in technologies and biomarkers that the Company has patented or has itself licensed. For each instance in which a license is granted, it must be determined whether the license transfers to the customer at a point in time or over time. License revenue is recognized on an accrual basis in accordance with the substance of the underlying contract. License revenue determined over time is recognized on a straight-line basis over the term of the contract. License revenue that is based on product sales and/or other reference values is recognized on the basis of the underlying contract, to the extent that those reference values can reliably be determined.

In the case of sales with a right of return, the revenue is only recognized in full when the right of return expires. At this date, the revenue is only recognized at cost less any costs of return. There were no sales with a right of return in the reporting period.

Cost of sales

Cost of sales includes expenses for material used in products sold, changes in inventories, services received in connection with product sales or other types of revenue, royalties to be paid to third parties and triggered by product sales or other types of revenue. In addition, cost of sales includes directly allocable portions of personnel costs, costs of intellectual property, depreciation, amortization and impairment, as well as *pro rata* overheads.

Other income

Other income includes third-party research grants, currency exchange rate gains, earnings from the reversal of provisions, income from the sale of assets outside of the Company's ordinary business activities, reimbursements from suppliers and insurance companies, and other non-operating earnings.

Government grants

In individual cases, cost contributions from public authorities are granted for research projects. These grants are partially paid in advance and then reported as deferred income. To some extent, grants will only be paid after the work has been performed and proven. A current asset is recorded in such cases.

Subsidies received for product development activities are deducted from capitalized development costs, and investment grants and subsidies are offset directly against the acquisition costs of the subsidized assets, i.e., in both cases the carrying amount of the asset is reduced. The grant is thus recognized as a reduced depreciation expense over the remaining useful life.

Government grants usually come with certain requirements, which have been met so far by the Company and are expected to be met going forward. Should the requirements cease to be met in the future, redemption obligations could arise which have not been recognized yet.

Research and development costs

Research and development costs (R&D costs) include the personnel costs for the R&D staff, costs of R&D material, depreciation, amortization and impairment, service fees, licensing fees and other direct expenses in connection with the Company's research and/or development activities (including clinical studies) which cannot be classified as revenue-generating activities. In addition, R&D costs include pro rata overhead costs charged to the R&D departments.

Selling, general and administrative costs

Selling, general and administrative costs (SG&A costs) include:

- all direct personnel and material expenses of the corresponding departments,
- depreciation and amortization expenses of the corresponding departments,
- other direct expenses of the corresponding departments, and
- pro rata overheads of the corresponding departments as well as the Company's statutory costs.

Other expenses

Other expenses consist of all operating expenses which do not classify as cost of sales, R&D costs or SG&A costs as defined above. This includes in particular but not exclusively

- foreign exchange rate losses,
- losses from the disposal of assets outside of the ordinary business activities, and
- expenses due to extraordinary effects or measures such as restructuring expenses or write-downs of non-current assets (e.g., goodwill impairment).

Share-based payment expenses

The fair value of granted stock options is determined in accordance with IFRS 2 *Share-based Payment* by simulation of the future movement in the Company's share capital on the basis of market parameters (e.g., volatility and risk free rate) and normal distributed random numbers ("Monte Carlo simulation"). The fair value of the stock options is expensed over the expected option term of up to four years against the capital reserve. The measurement is based on the fair value as of the grant date.

The fair value of phantom stock rights granted in previous years is calculated using the binomial model based on the Cox-Ross-Rubinstein model in accordance with IFRS 2 *Share-based Payment*, and recognized *pro rata temporis* as expenses and as a provision due to the obligation of the Company for a cash settlement in the future. If phantom stock rights are held by current employees of the Group, the related expenses are recorded as personnel costs and included in the payroll provisions. If phantom stock rights are held by former employees of the Group, the related expenses are recorded as other costs and included in other provisions.

Intangible assets

Intangible assets other than goodwill and capitalized development costs are measured at cost less straight-line amortization. Depending on the investment, the useful life of between three years (software) and twenty years (patents) will be defined. For patents, the useful life in individual cases depends on the term of the patent protection. Amortization of intangible assets is allocated in the consolidated statement of comprehensive income (consolidated statement of profit or loss and comprehensive income) to the functional area in which they are used. IAS 38 *Intangible Assets* is applied. In accordance with this standard, an intangible asset is reported if it is likely that a future economic benefit is associated with the use of such asset and that its cost can be reliably determined.

Intangible assets with indefinites useful lives and intangible assets not yet available for use are tested for impairment annually. In addition, assets or groups of assets are tested for impairment if there are any indications at the measurement date that they may be impaired. If the carrying amount of an intangible asset exceeds the recoverable amount of this asset as of the balance sheet date, this will be taken into account by means of a write-down, the amount of which is determined by the result of the impairment test. If there is no longer any indication of impairment, the impairment loss is reversed up to a maximum of the asset's amortized cost.

Rights of use and leases

The Company does not account for short-term leases or leases that involve assets of minor value and recognizes the payments based thereon as expenses. Material leases entered into by the Company are accounted for using a uniform model. The rights of use for the underlying assets are measured at cost less accumulated amortization/ depreciation and regularly reviewed for impairment. The rights are amortized on a straight-line basis over the underlying lease terms.

At the beginning of the respective useful lives, lease liabilities arising from leases are recognized at the present value of the lease payments (rents) payable over the term of the lease. To calculate the present value, the Company uses a marginal borrowing rate applicable at that time.

In the case of leases with a remaining term of more than twelve months at the valuation date, the corresponding lease liabilities are divided and reported as current (due within twelve months) and non-current (due after more than twelve months) liabilities.

Capitalized development costs

Expenditure on research activities is recognized as an expense in the period in which it is incurred. An internally generated intangible asset arising from internal development is recognized if, and only if, all of the following requirements in accordance with IAS 38.57 *Intangible Assets* have been fulfilled:

- proof of the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- proof of the intention to complete the intangible asset to use or sell it;
- proof of the ability to use or sell the intangible asset;
- proof of how the intangible asset will generate probable future economic benefits;
- proof of the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset;
- demonstration of the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for the capitalization of development costs is the sum of expenditure incurred from the date when the intangible assets first met the aforementioned recognition criteria. Where no internally generated intangible asset can be recognized, development expenditure is charged to profit or loss in the period in which it is incurred. Subsequent to initial recognition, capitalized development costs are reported at cost less accumulated amortization and impairment losses, on the same basis as intangible assets acquired separately. The useful life of such capitalized development costs is assumed under consideration of the business plan and amounts to up to ten years for the currently capitalized assets. Amortization is recorded on a straight-line basis.

Property, plant and equipment

Property, plant and equipment is measured at cost less depreciation. Apart from directly attributable costs, *pro rata* overhead costs and depreciation are also included in the cost of internally produced items of property, plant and equipment. The cost is reduced by public and governmental investment grants. Repair costs are immediately recorded as an expense. Leasehold improvements are depreciated on a straight-line basis over the remaining term of the underlying leases (including optional extension periods). Movable items of property, plant and equipment are depreciated on a straight-line basis. The useful life is three to ten years for technical and electronic equipment and five to ten years for operating and office equipment.

Once disposed of, the asset and its accumulated depreciation are reported as a disposal. Income or expenses resulting from the disposal of assets (proceeds less residual carrying amount) is reported in the consolidated statement of comprehensive income (consolidated statement of profit or loss and comprehensive income) under other income/other expenses.

If, based on external or internal sources of information, there are indications that the carrying amount at the balance sheet date of an item of property, plant or equipment measured as described above exceeds its recoverable amount upon disposal, the asset is tested for impairment and, if necessary, written down. The amount of the impairment is determined on the basis of the fair value of the item of property, plant and equipment less costs to sell or – if higher – the net present value of future cash flows estimated from the value in use of the item of property, plant and equipment. An impairment test will be carried out annually for assets or groups of assets for which an impairment is assumed. If there is no longer any indication of impairment, the impairment loss is reversed up to a maximum of the asset's amortized cost.

Deferred taxes

Deferred taxes are calculated in accordance with IAS 12 *Income Taxes*. They are recognized on the basis of temporary differences between the carrying amount of assets and liabilities in the financial statements in accordance with IFRS of the companies involved and in their tax accounts. Furthermore, deferred tax assets are recognized for unutilized tax loss carryforwards and unutilized tax credits to the extent that deferred tax liabilities exist, or that taxable income is likely to be available against which to utilize the benefits of the temporary differences and that these are expected to reverse in the foreseeable future. At each balance sheet date, it is determined whether or not these requirements are still met. If such a realization in the foreseeable future is not likely, a valuation allowance is recognized against the tax loss carryforwards.

Deferred tax assets and tax liabilities from temporary differences associated with investments in subsidiaries are not recognized when the timing of the reversal of the temporary difference can be controlled, and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets and liabilities are measured using the local tax rates applicable on the balance sheet date or the local tax rates which are expected to apply at the future point in time when the asset is realized or the liability settled. Tax rates are used that have been enacted or substantively enacted by the end of the reporting period. Deferred tax assets and liabilities are only offset if they relate to taxes levied by the same tax authority and if the Group intends to settle its current tax assets and liabilities on a net basis.

Inventories

Inventories consist of finished and unfinished products, raw materials, low-value consumables as well as other production supplies. They are measured at the lower of cost and net realizable value. The manufacturing costs of the finished and semi-finished products include directly attributable unit costs, depreciation, amortization of capitalized development costs and overheads attributable to the production process. For finished and semi-finished products the principle of item-by-item measurement applies.

Financial instruments

A financial instrument is a contract that gives rise to a financial asset for one contracting party and a financial liability or equity instrument for another contracting party.

At initial recognition, trade receivables without significant financing components are measured at their transaction price. All other financial assets and liabilities are initially measured at fair value.

When the Company first recognizes a financial asset, it assigns it to one of the following measurement categories:

- at amortized cost
- debt instruments at fair value through other comprehensive income (FVOCI)
- equity instruments at fair value through other comprehensive income (FVOCI)
- at fair value through profit or loss (FVTPL).

In the case of assets not at fair value through profit or loss, these are measured at initial recognition on the basis of the transaction costs directly attributable to their acquisition or issue.

Financial assets are only reclassified following initial recognition when the Company changes its business model for managing financial assets.

A financial asset is measured at amortized cost if it is not designated as at fair value through profit or loss and both of the following conditions are met:

- it is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows, and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt instrument is measured at fair value through other comprehensive income if it is not designated as at fair value through profit or loss and both of the following conditions are met:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

At initial recognition of an investment in an equity instrument that is not held for trading, the Company can make the irrevocable election to present in other comprehensive income subsequent changes in the fair value of that investment. The Company makes this election on a case-by-case basis for each investment.

All financial assets not measured at amortized cost or fair value through other comprehensive income are measured at fair value through profit or loss. This includes all derivative financial assets. The Company may, at initial recognition, irrevocably designate as measured at fair value through profit or loss financial assets that would otherwise have fulfilled the criteria for measurement at amortized cost or fair value through other comprehensive income, if doing so eliminates or significantly reduces a measurement or recognition inconsistency (accounting mismatch).

The Company assesses the objectives of the business model within which the financial asset is held. It does so at portfolio level since this is the best way to reflect how the business is managed and how information is passed on to management. The information to be taken into consideration includes:

- the disclosed policies and objectives of the portfolio and the practical implementation of those policies;
- how the portfolio's performance is measured and reported to management;
- the risks to which the performance of the business model (and the financial assets held under that business model) is exposed and how those risks are managed;
- the frequency, extent and timing of sales of financial assets in prior periods and expectations in respect of future sales activities.

Financial assets held or managed for trading whose performance is assessed on the basis of fair value are measured at fair value through profit or loss.

In order to determine whether the contractual cash flows are solely payments of principal and interest on the principal amount outstanding, "principal" is defined as the fair value of the financial asset at initial recognition. "Interest" consists of consideration for the time value of money, for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g., liquidity risk and administration costs), as well as a profit margin. In determining whether the contractual cash flows are solely payments of principal and interest on the principal amount outstanding, the Company takes into consideration the contractual terms underlying the instrument. This includes determining whether the financial asset includes a contractual term that could change the timing or amount of the contractual cash flows and thus cause this condition to no longer be met. In its assessment, the Company takes into consideration:

- specific events that would trigger a change in the timing or amount of the cash flows,
- terms that would cause the interest rate (including variable interest rate) to be adjusted,
- options for early repayment or extensions, and
- terms that limit the Company's claim to the cash flows from a specified asset.

A prepayment option fulfills the criterion of solely payments of principal and interest on the principal amount outstanding if the prepayment amount substantially represents only unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for the early termination of the contract.

Financial liabilities are classified and measured at amortized cost or at fair value through profit or loss. A financial liability is classified at fair value through profit or loss if it is held for trading, is a derivative or is designated as such at initial recognition. Measuring financial liabilities at fair value through profit or loss means that they are carried at fair value and any net gains or losses, including interest expenses, are recognized through profit or loss. Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expenses and foreign exchange gains or losses are recognized through profit or loss. Gains or losses on derecognition are likewise recognized through profit or loss.

The Company derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire or it transfers the right to receive the cash flows as part of a transaction in which substantially all of the risks and rewards of ownership of the financial asset are also transferred. Derecognition also applies if the Company neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset and does not retain control of the transferred asset. The Company executes transactions in which it transfers the recognized assets but retains either all or substantially all of the risks and rewards of ownership of the transferred asset. In these cases, the transferred assets are not derecognized. Write-downs are generally recognized on trade receivables if they are more than one year overdue and are not subject to enforcement action.

The Company derecognizes a financial liability if the obligations specified in the contract are discharged or canceled or expire, or if the terms of the contract have been amended and the cash flows from the modified liability are significantly different. In this case, a new financial liability is recognized at fair value on the basis of the modified contractual terms. When derecognizing a financial liability, the difference between the carrying amount of the repaid liability and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognized through profit or loss.

The Company invoices its customers in accordance with the individual contractual arrangements or the valid general terms and conditions of business. The invoices are generally payable net within 30 days. Prepayment is generally a condition for new customers. In the case of license receivables, the payment terms are determined on the basis of the underlying licensing agreements. The resulting payments are either payable on demand or within a period of up to 90 days.

Cash equivalents

A cash equivalent is defined as a financial instrument which is readily convertible on a short-term basis to a known amount of cash and which is subject to an insignificant risk of changes in value (IAS 7.6 *Statement of Cash Flows*). Financial instruments generally qualify as cash equivalents when they are more closely related to the money markets than to the bond markets and have a remaining term of less than three months. They are measured at amortized cost.

Prepaid expenses

Payments before the balance sheet date in respect of expenses for a specific period after that date are deferred and reported at amortized cost as prepaid expenses in other current assets.

Deferred income

Deferred income is recognized for grants and for research and development payments ("R&D payments") received in advance. Grants received in advance for research expenses which were provided by governmental or comparable national, regional or local authorities are recognized through profit or loss as other income over the subsidized terms of each grant project according to its stage of completion. Subsidies received in advance for product development activities are deducted from capitalized development costs. Payments received in advance from customers for R&D services to be rendered by the Company in the future or for licenses are deferred and recognized through profit or loss under the terms and conditions of the contract according to the stage of project completion (cost-to-cost method).

Provisions

In accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, a provision is recognized if a present obligation exists as a result of a past event, if it is probable that an outflow of resources embodying economic benefits will be required to settle this obligation and if a reliable estimate can be made of the amount of the obligation. The amount recognized as a provision is the best estimate of the expenditure required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows expected to be required to settle the present obligation, its carrying amount is the present value of these cash flows. Obligations arising from share-based payment programs that provide for awards payable in cash (i.e., the Company's phantom stock programs) are measured at fair value and recognized as current or non-current provisions based on the remaining term of the underlying rights until these can be exercised.

ALTERNATIVE PERFORMANCE INDICATORS

The operating result, or rather earnings before interest and taxes (EBIT), is defined as the total comprehensive income for the year/period before other comprehensive income for the year/period, income taxes, the other financial result, interest expenses and interest income. EBITDA is defined as EBIT before depreciation and amortization. Share-based payment is defined as the expenses resulting from the change in the total fair value of all stock options and phantom stock rights granted over the fiscal year/the period. EBITDA before share-based payment expenses is defined as EBITDA before expenses resulting from share-based payment.

EBIT, EBITDA and EBITDA before share-based payment expenses are all non-IFRS measures used and defined by Epigenomics that are standard practice in global capital market communication and are sought after by analysts and investors.

CURRENCY TRANSLATION

In the separate financial statements, receivables and liabilities in foreign currencies are measured using the corresponding euro reference rate published by the European Central Bank and applicable as of the balance sheet date.

The functional and reporting currency of our U.S. subsidiary is the U.S. dollar.

For consolidation purposes, the expenses and income of the subsidiary are translated into euros at the average monthly exchange rates. The assets and liabilities of the subsidiary are translated into the Group's reporting currency (euros) at the end of each reporting period using the closing rate. Equity components that are measured in terms of historical cost in U.S. dollars are translated using the exchange rate at the date of the transaction. The resulting translation differences are accounted for separately within equity.

Foreign currency exchange rates applied in the reporting period:

	Closing rates		**Average rates**	
	Dec. 31, 2018	**Dec. 31, 2019**	**2018**	**2019**
EUR/USD	1.1450	1.1234	1.1793	1.1195

NOTES TO THE CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME)

1 REVENUE

Revenue by type:

	2018		2019	
	EUR thousand	in %	EUR thousand	in %
Product sales (own and third-party)	808	52.7	988	87.8
License revenue	636	41.5	137	12.2
R&D revenue and reimbursements	46	3.0	0	0
Other revenue	43	2.8	0	0
Total revenue	1,533	100.0	1,125	100.0

License revenue is generated by out-licensing of own intellectual property (e.g., technologies, biomarkers) to third parties. Revenue from product sales is generated by the sale of the Group's products through own sales channels, through distribution partners or by the rendering of services by third parties based on the Company's products. R&D revenue and reimbursements are generated by rendering services in connection with contract research and by charging pass-through costs to third parties.

Revenue by geographical market:

	2018		2019	
	EUR thousand	in %	EUR thousand	in %
Europe	296	19.3	267	23.8
North America	637	41.6	714	63.4
Asia	598	39.0	135	12.0
Rest of the world	2	0.1	9	0.8
Total revenue	1,533	100.0	1,125	100.0

In the reporting year, 46% of total revenue (2018: 81%) was generated by the Company's three largest customers.

2 OTHER INCOME

EUR thousand	2018	2019
Foreign exchange rate gains	704	2,187
Recoveries and refunds	64	156
Income from the reversal of provisions	564	94
Correction of deferred liabilities	23	31
Third-party research grants from public authorities	58	17
Income from the disposal of other assets	1	0
Other	27	3
Total other income	1,441	2,488

Of the income from the reversal of provisions, EUR 20 thousand (2018: EUR 544 thousand) was due to fluctuations in the fair value of the phantom stock rights granted.

3 COST ALLOCATION BY FUNCTION

2018 EUR thousand	Cost of sales	R&D costs	SG&A costs	Other expenses	Total
Materials and consumables	422	383	40	0	845
Depreciation and amortization	0	221	87	0	308
Personnel costs	5	2,901	4,440	0	7,346
Other costs	13	2,913	4,136	308	7,370
Total	440	6,418	8,703	308	15,869

2019 EUR thousand	Cost of sales	R&D costs	SG&A costs	Other expenses	Total
Materials and consumables	239	1,010	15	0	1,264
Depreciation and amortization	0	267	246	0	513
Personnel costs	0	2,596	4,166	0	6,762
Other costs	14	3,467	4,508	1,758	9,747
Total	253	7,340	8,935	1,758	18,286

4 PERSONNEL COSTS

EUR thousand	2018	2019
Wages and salaries	5,495	5,081
Share-based payment expenses	1,151	873
– thereof expenses for issuing stock options (SO) to members of the Executive Board	*371*	*310*
– Expenses for issuing SO to G. Hamilton (CEO)	*211*	*175*
– Expenses for issuing SO to Jorge Garces (CEO)	*58*	*59*
– Expenses for issuing SO to Albert Weber (EVP Finance)	*102*	*76*
Social security expenses	700	808
– thereof employer's contribution to a national pension fund (Germany)	*134*	*127*
– thereof employer's contribution to a 401(k) savings plan (U.S.A.)	*68*	*90*
Total personnel costs	7,346	6,762

The Group employed an average of 43 employees in 2019 (2018: 43). The 41 employees as of the end of 2019 included 21 employees across the areas of research, product development, IP, regulatory affairs, quality assurance and manufacturing. Their activities are reported as R&D costs in the financial statements. The remaining 20 employees reported as selling, general and administrative functions work in business and commercial development, customer and technical service, accounting, finance, legal, human resources, IT, investor relations and general management.

As in the prior year, there was no expense either for payments for exercise of PSRs or for the remeasurement of PSRs granted but not exercised. The fluctuation of the fair value of the rights amounted to EUR 0 thousand (2018: EUR 2 thousand). Measurement of the stock options granted gave rise to share-based payment expenses amounting to EUR 873 thousand (2018: EUR 1,151 thousand).

5 DEPRECIATION AND AMORTIZATION

EUR thousand	2018	2019
Amortization of intangible assets	196	194
– thereof amortization of capitalized development costs	*119*	*119*
Depreciation of property, plant and equipment	112	319
– thereof depreciation of right-of-use assets	*0*	*202*
Total depreciation and amortization	308	513

6 OTHER EXPENSES

EUR thousand	2018	2019
Foreign exchange rate losses	305	1,757
Losses from the disposal of assets	2	1
Other	1	0
Total other expenses	308	1,758

7 OPERATING RESULT (EBIT) AND EBITDA

EUR thousand	2018	2019
Operating result/earnings before interest and taxes (EBIT)	-12,895	-14,673
Total depreciation and amortization	308	513
EBIT before depreciation and amortization (EBITDA)	-12,587	-14,160
Share-based payment expenses	1,151	873
EBITDA before share-based payment expenses	-11,436	-13,287

8 FINANCIAL RESULT

Net gains and losses on all financial instruments:

EUR thousand	2018	2019
Interest from available-for-sale financial assets	17	18
Interest on time deposits	0	154
Interest and related income	17	172
Total financial income	17	172
Other interest expenses	-550	-63
thereof from leasing contracts	0	-63
Interest and related expenses	-550	-63
Other finance costs	-2	-2
Total financial expenses	-552	-65
Total financial result	-535	107

9 TAXES ON INCOME

The reported taxes on income in the amount of EUR 2,454 thousand (2018: EUR -738 thousand) consist solely of taxes relating to the Company's U.S. subsidiary.

EUR thousand	2018	2019
Current tax expenses	23	34
Deferred tax income due to loss carryforwards	-761	-732
Valuation allowance	0	3,152
Total taxes on income	-738	2,454

For the calculation of deferred taxes of the U.S. subsidiary, a local tax rate of 21% was applied there.

Calculation of the applicable tax rate in Germany for the purpose of deferred taxes:

in %	2018	2019
Corporate income tax	15.0	15.0
Solidarity surcharge	5.5	5.5

Trade tax	14.35	14.35
underlying trade tax rate of assessment	*410*	*410*
Total applicable tax rate in Germany for the purpose of deferred taxes	30.2	30.2

Tax reconciliation:

EUR thousand	**2018**	**2019**
Net loss for the year before taxes on income	-13,430	-14,566
Expected tax income	4,056	4,399
applicable tax rate for the Group	*30.2%*	*30.2%*
– permanent differences	*-40*	*-40*
– other foreign taxes	*-23*	*-34*
– effect of foreign taxes	*-348*	*-415*
– unrecognized tax loss carryforwards	*-2,867*	*-3,944*
- *Impairment of deferred taxes assets from previous years*	*0*	*-2,420*
Effective tax income/ expense	738	-2,454
Effective tax rate	5.8%	-16.9%

The expected tax income/ expense for the reporting year has been calculated by applying the individual tax rates for the Group companies to the net results before taxes on income. Due to the impairment of tax assets capitalized in previous years, the effective tax rate for the reporting year is not meaningful. Permanent differences result from non-deductible expenses in accordance with German tax law.

10 EARNINGS PER SHARE

Earnings per share (basic) are calculated by dividing the net loss for the year by the weighted average number of shares issued. The outstanding stock options and convertible notes granted by the Company are antidilutive in accordance with IAS 33.41 and 33.43 *Earnings per Share*. Therefore, the earnings per share (diluted) equal the earnings per share (basic). The number of shares issued as of the balance sheet date amounted to 43,527,692 (December 31, 2018: 36,021,540).

	2018	**2019**
Net loss for the year (in EUR thousand)	-12,692	-17,020
Weighted average number of shares issued	27,016,155	37,272,565
Earnings per share (basic and diluted, in EUR)	-0.47	-0.46

NON-CURRENT ASSETS

11 INTANGIBLE ASSETS

EUR thousand		Software	Licenses/ patents	Development costs	Total intangible assets
Jan. 1, 2018	Cost	410	1,038	3,653	5,101
	Additions	16	0	0	16
	Disposals	0	0	-14	-14
	Currency translation	0	0	0	0
Dec. 31, 2018	Cost	426	1,038	3,639	5,103
	Additions	52	0	0	52
	Disposals	0	-17	0	-17
	Currency translation	0	0	0	0
Dec. 31, 2019	Cost	478	1,021	3,639	5,138
Jan. 1, 2018	Accumulated amortization	249	995	3,189	4,433
	Additions	45	31	119	195
	Disposals	0	0	0	0
	Currency translation	0	0	0	0
Dec. 31, 2018	Accumulated amortization	294	1,026	3,308	4,628
	Additions	63	12	119	194
	Disposals	0	-17	0	-17
	Currency translation	0	0	0	0
Dec. 31, 2019	Accumulated amortization	357	1,021	3,427	4,805
Dec. 31, 2018	Carrying amounts	132	12	331	475
Dec. 31, 2019	Carrying amounts	121	0	212	333

The capitalized development costs for Epi proColon and Epi proLung are assumed to have a useful life of ten years. The annual amortization for these assets amounted to EUR 111 thousand (Epi proColon) and EUR 8 thousand (Epi proLung).

12 PROPERTY, PLANT AND EQUIPMENT

EUR thousand		Fixtures/ leasehold improvements	Technical equipment	Other property, plant and equipment	Recognized right-of-use assets	Total property, plant and equipment
Jan. 1, 2018	Cost	566	1,270	85	0	1,921
	Additions	3	91	0	0	94
	Disposals	0	-82	0	0	-82
	Currency translation	0	2	1	0	3
Dec. 31, 2018	Cost	569	1,281	86	0	1,936
	Additions	0	62	8	1,078	1,148
	Disposals	0	-19	-2	0	-21
	Currency translation	0	1	1	0	2
Dec. 31, 2019	Cost	569	1,325	93	1,078	3,065
Jan. 1, 2018	Accumulated depreciation	183	979	39	0	1,201
	Additions	44	61	8	0	113
	Disposals	0	-79	0	0	-79
	Currency translation	0	1	0	0	1
Dec. 31, 2018	Accumulated depreciation	227	962	47	0	1,236
	Additions	44	64	8	202	318
	Disposals	0	-19	-1	0	-20
	Currency translation	0	0	0	-1	-1
Dec. 31, 2019	Accumulated depreciation	271	1,007	54	201	1,533
Dec. 31, 2018	Carrying amounts	342	319	39	0	700
Dec. 31, 2019	Carrying amounts	298	318	39	877	1,532

Subsidies received in previous years reduced the cost of individual items of property, plant and equipment. These subsidies constitute public financial assistance for businesses under the joint program for the improvement of regional economic structures (*Gemeinschaftsaufgabe "Verbesserung der regionalen Wirtschaftsstruktur"*) granted from German federal and state funds. The funding period ended on April 8, 2017. However, if certain conditions attaching to the funding are not complied with going forward, the funding sponsors may demand partial or full repayment of the subsidies in the following years. These conditions include preserving the current permanent jobs at the Company's Berlin site and the obligation to keep the subsidized assets for a period of at least five years after the end of the project at the subsidized location. The Company assumes that it will be able to fulfill all of the conditions.

The newly capitalized rights of use relate to the Group's leases for office and laboratory space at the Berlin and Seattle locations, which were recognized for the first time due to the mandatory application of IFRS 16 *Leases*. For initial application, use was made of the option of applying a single discount rate to a portfolio of similarly structured leases. There were no leases with residual terms of less than twelve months in the Group at the time of initial application. In accordance with the option, leases of minor value were not capitalized but instead recognized as expenses in the amount of EUR 6 thousand. Short-term leases were also not capitalized and were recognized as expenses in the amount of EUR 35 thousand.

13 ASSETS SCHEDULE

EUR thousand		Intangible assets	Property, plant and equipment	Total intangible assets and property, plant and equipment
Jan. 1, 2018	Cost	5,101	1,921	7,022
	Additions	16	94	110
	Disposals	-14	-82	-96
	Currency translation	0	3	3
Dec. 31, 2018	Cost	5,103	1,936	7,039
	Additions	52	1148	1200
	Disposals	-17	-21	-38
	Currency translation	0	2	2
Dec. 31, 2019	Cost	5,138	3,065	8,203
Jan. 1, 2018	Accumulated depreciation and amortization	4,433	1,201	5,634
	Additions	195	113	308
	Disposals	0	-79	-79
	Currency translation	0	1	1
Dec. 31, 2018	Accumulated depreciation and amortization	4,628	1,236	5,864
	Additions	194	318	512
	Disposals	-17	-20	-37
	Currency translation	0	-1	-1
Dec. 31, 2019	Accumulated depreciation and amortization	4,805	1,533	6,338
Dec. 31, 2018	Carrying amounts	475	700	1,175
Dec. 31, 2019	Carrying amounts	333	1,532	1,865

14 DEFERRED TAXES

For the Group, deferred taxes arise as described in the following table:

	Deferred tax assets from temporary differences		Deferred tax liabilities from temporary differences	
EUR thousand	**Dec. 31, 2018**	**Dec. 31, 2019**	**Dec. 31, 2018**	**Dec. 31, 2019**
Intangible assets and property, plant and equipment	20	0	100	227
Non-current liabilities	0	0	0	164
Current liabilities	0	0	117	34
Total	20	0	217	425
Total after offsetting	0	0	197	425

Overview of tax loss carryforwards (2019 estimated):

EUR thousand	**2018**	**2019**
Tax loss carryforwards in Germany (corporate income tax)	201,287	210,870
Tax loss carryforwards in Germany (trade tax)	199,740	209,290
Tax loss carryforwards in the U.S.A. (corporate income tax)	11,324	15,976
R&D tax credits in the U.S.A.	3,139	3,641

Reconciliation of deferred tax assets (2019 estimated):

EUR thousand	**Dec. 31, 2018**	**Dec. 31, 2019**
Deferred tax assets due to German tax loss carryforwards	60,516	63,424
Deferred tax assets due to U.S. tax credits	3,139	3,641
Deferred tax assets due to U.S. tax loss carryforwards	2,378	3,355
Total deferred tax assets due to tax loss carryforwards	66,033	70,420
Deferred tax position (net) from temporary differences	-197	-192
Total deferred tax assets	65,836	70,228
Allowance on deferred tax assets	-63,418	70,228
Recognized deferred tax assets	2,378	0

Since all deferred tax assets and liabilities arising from temporary differences must be settled with the same tax authority that levied the taxes to which those deferred tax assets and liabilities relate, in accordance with IAS 12.71 *et seq*. *Income Taxes*, only those deferred tax assets and liabilities which relate to taxes levied by the same tax authority have been offset.

Since its founding through to December 31, 2018, the Company's tax loss carryforwards in Germany amounted to EUR 201 million for corporate income tax and to EUR 200 million for trade tax. Furthermore, the Company estimates that the accumulated tax loss carryforwards in both aforementioned tax categories will increase by more than EUR 9 million when it files its tax returns for 2019. In accordance with German tax law, such tax losses have an unlimited carryforward period. As a consequence of completed tax audits, tax loss carryforwards in the amount of EUR 167 million are undisputed. The resulting deferred tax asset is therefore sufficient to offset the aforementioned deferred tax liability from temporary differences of EUR 425 thousand as of December 31, 2019. However, a future utilization of these carryforwards could become impossible under certain conditions (e.g., a major change of ownership and a change of business) based on the applicable German tax law. Due to the current financial situation of the Company, without sufficient liquidity to achieve the break-even point, valuation allowances have been recognized for the calculated exceeding amount of deferred tax assets at the balance sheet date.

The temporary differences connected with shares in subsidiaries, for which no deferred tax assets had been recognized in the reporting periods presented, totaled EUR 16,137 thousand (2018: EUR 9,082 thousand).

In the prior periods, the Company recognized deferred tax assets in connection with tax loss carryforwards of Epigenomics, Inc. and temporary differences between IFRSs and U.S. tax law, since in accordance with the Company's business plans it was viewed as highly likely that the Company would use the tax loss carryforwards of Epigenomics, Inc. in subsequent years, as of the respective reporting dates. The Company continues to consider it realistic that the loss carryforwards will be utilized going forward. Further delays in the reimbursement decision for Epi proColon in the U.S.A. meant that the loss carryforwards continued to accumulate in 2019. However, taking into additional consideration the expected duration of the administrative procedure at the healthcare authorities in the U.S.A. (CMS) and the Company's adjusted business planning, the Company has postponed until future years the date on which it expects an initial opportunity for use. Against this backdrop and in line with the requirements of the IFRSs, the Company has concluded that continuing to recognize its tax assets in the U.S.A. would not be compliant with the standards. The deferred tax assets recognized to date were therefore written off in the reporting period.

The R&D tax credits in the U.S.A. expire on various dates beginning in 2022 through to 2038.

Changes in recognized deferred tax assets in the reporting year:

EUR thousand	**2018**	**2019**
January 1	1,526	2,378
Deferred tax income	761	732
Allowance	0	-3,152
Foreign currency adjustments	91	42
December 31	2,378	0

CURRENT ASSETS

15 INVENTORIES

EUR thousand	Dec. 31, 2018	Dec. 31, 2019
Consumables, raw materials, supplies	123	42
Semi-finished goods	84	47
Finished goods	157	224
Total inventories	364	313

The cost of inventories recognized as R&D costs through profit or loss in 2019 amounted to EUR 352 thousand (2018: EUR 96 thousand) and was attributable to write-offs of finished goods due to the determination of an unlikelihood that these goods could have been sold before the end of their shelf lives or because their shelf lives had already expired.

16 TRADE RECEIVABLES

Trade receivables primarily include receivables from development partners, customers and licensees. These receivables do not bear interest and are therefore not exposed to any interest rate risk. The carrying amounts of the receivables correspond to their fair values. The maximum default risk corresponded to the carrying amount as of the balance sheet date.

EUR thousand	Dec. 31, 2018	Dec. 31, 2019
Trade receivables	164	89
– *thereof not yet due*	*122*	*21*
– *thereof past due (up to 90 days)*	*9*	*19*
– *thereof not yet invoiced (assets from contractual relationships)*	*33*	*49*

No allowances for doubtful accounts had been recognized as of the balance sheet date.

17 MARKETABLE SECURITIES

The marketable securities in the amount of EUR 880 thousand as of December 31, 2019 (December 31, 2018: EUR 653 thousand) are so-called "Trust-preferred Securities" issued by a wholly owned subsidiary of Deutsche Bank AG. At the issuer's discretion, they are redeemable at any time in one payment. In prior periods they had been held as "available-for-sale" financial instruments in accordance with IAS 39.9 *Financial Instruments: Recognition and Measurement*. Since the Company does not intend to trade them, they are classified as measured at fair value through other comprehensive income.

The reported securities are denominated in euros and are subject to the usual market and interest risks. The interest rate risks are price risks and interest rate cash flow risks. The fair value of the marketable securities is identified by their stock exchange quotations at each relevant balance sheet date. The securities were traded on active markets in the reporting year.

18 CASH AND CASH EQUIVALENTS

Cash and cash equivalents decreased to EUR 10,155 thousand as of the balance sheet date (December 31, 2018: EUR 16,487 thousand). 70.5% of those funds was denominated in euros at the balance sheet date, with the remainder denominated in U.S. dollars. The total amount was deposited in current accounts at three different banks.

At the balance sheet date, an amount of EUR 86 thousand of bank deposits was restricted cash.

19 OTHER CURRENT ASSETS

EUR thousand	Dec. 31, 2018	Dec. 31, 2019
Prepaid expenses	338	268
Receivables from tax authorities	197	294
Claims under insurance contracts	1	78
Interest receivables	9	12
Claims from grant projects	1	0
Other	60	34
Total other current assets	606	686

20 SHARE CATEGORIES AND CAPITAL STRUCTURE

As of December 31, 2019, the share capital of Epigenomics AG consisted exclusively of non-par value ordinary registered shares with equal rights.

Equity structure of the Company as of the balance sheet date:

EUR	Dec. 31, 2018	Dec. 31, 2019
Subscribed capital	36,021,540	43,527,692
Authorized Capital	0	10,504,618
* Authorized Capital 2019/I	0	3,602,154
* Authorized Capital 2019/II	0	6,902,464
Conditional Capital	12,007,180	17,989,705
* Conditional Capital VII	21,065	0
* Conditional Capital IX	521,095	521,095
* Conditional Capital X	9,465,020	14,468,610
* Conditional Capital XI	1,000,000	1,000,000
* Conditional Capital XII	1,000,000	1,000,000
* Conditional Capital XIII	0	1,000,000

By a resolution of the Annual General Shareholders' Meeting of the Company dated May 15, 2019, Authorized Capital 2019/I and Authorized Capital 2019/II were newly created.

Subscribed capital increased by 7,506,152 shares or EUR 7,506,152 in November 2019 by way of partial use of Authorized Capital 2019/II as part of a capital increase through issuing new shares with subscription rights for existing shareholders.

Authorized Capital 2019/I

The Executive Board is authorized until May 14, 2024 to increase with the consent of the Supervisory Board the share capital of the Company once or several times by up to a total of EUR 3,602,154.00 against contribution in cash and/or in kind by issuing new non-par value registered shares (**Authorized Capital 2019/I**). The subscription rights shall be granted to the shareholders. The new shares can also be subscribed by one or more credit institutions or companies acting according to Section 53 Paragraph 1 Sentence 1 or Section 53b Paragraph 1 Sentence 1 or Paragraph 7 of the German Banking Act (KWG) under the obligation to offer the shares to the shareholders for subscription (indirect subscription right). The Executive Board is, however, authorized to exclude, with the consent of the Supervisory Board, the shareholders' statutory subscription rights in the following events:

– for fractional amounts;

– if the new shares are issued according to Section 186 Paragraph 3 Sentence 4 AktG against contribution in cash at an issue price which is not significantly below the stock exchange price of the shares already listed, and the pro rata notional portion of the share capital represented by the new shares does not exceed ten per cent (10 %) of the share capital at the time this authorization is registered with the commercial register, or, if lower, at the respective time when the authorization is exercised. Other shares which have been newly issued by the Company by way of a capital increase against contribution in cash during the term of this authorization pursuant to Section 186 Paragraph 3 Sentence 4 AktG or Section 203 in connection with Section 186 Paragraph 3 Sentence 4 AktG, or which have been sold following a repurchase, in each case under exclusion of subscription rights, shall be counted towards the 10 % limitation. Furthermore, shares for which there is an option or conversion right or obligation, or a share delivery right in favor of the Company, based on bonds with warrants or convertible bonds or participation rights that have been issued during the term of this authorization under exclusion of subscription rights pursuant to Section 221 Paragraph 4 Sentence 2 in conjunction with Section 186 Paragraph 3 Sentence 4 AktG by the Company or a group company of the Company within the meaning of Section 18 AktG, in which the Company has a direct and/or indirect holding of at least 90 %, shall be counted towards the 10 % limitation;

– to the extent necessary to grant subscription rights for new shares to holders or creditors of option rights or creditors of convertible bonds or participation rights issued by the Company or a group company of the Company within the meaning of Section 18 AktG, in which the Company has a direct and/or indirect holding of at least 90 %, in the amount in which they would be entitled thereto upon the exercise of the option or conversion rights or the exercise of share delivery rights, or fulfillment of option or conversion obligations.

The Executive Board is further authorized to determine, with the consent of the Supervisory Board, the dividend rights of the new shares in deviation from Section 60 Paragraph 2 AktG as well as the further details of the implementation of capital increases from Authorized Capital 2019/I. The Supervisory Board is authorized to amend the wording of the Articles of Association, as appropriate, after implementation of a share capital increase from Authorized Capital 2019/I in accordance with the respective share capital increase or after expiry of the term of the authorization.

Authorized Capital 2019/II

The Executive Board is authorized until May 14, 2024 to increase with the consent of the Supervisory Board the share capital of the Company once or several times by up to a total of EUR 14,408,616.00 against contribution in cash by issuing new non-par value registered shares (**Authorized Capital 2019/II**). The subscription rights shall be granted to the shareholders. The Company shall organize a stock exchange trading of the subscription rights. The new shares can also be subscribed by one or more credit institutions or companies acting according to Section 53 Paragraph 1 Sentence 1 or Section 53b Paragraph 1 Sentence 1 or Paragraph 7 of the German Banking Act (KWG) under the obligation to offer the shares to the shareholders for subscription (indirect subscription right). The Executive Board is, however, authorized to exclude, with the consent of the Supervisory Board, the shareholders' statutory subscription rights for fractional amounts. The Executive Board is further authorized to determine, with the consent of the Supervisory Board, the dividend rights of the new shares in deviation from Section 60 Paragraph 2 AktG as well as the further details of the implementation of capital increases from Authorized Capital 2019/II. The Supervisory Board is authorized to amend the wording of the Articles of Association, as appropriate, after implementation of a share capital increase from Authorized Capital 2019/II in accordance with the respective share capital increase or after expiry of the term of the authorization.

In the reporting year, 7,506,152 new registered shares were issued from Authorized Capital 2019/II. This means that a further 6,902,464 new shares can be issued on the basis of this capital until May 14, 2024.

Conditional Capital IX

The share capital is conditionally increased by up to EUR 521,095.00 by means of issuing up to 521,095 new non-par value registered shares (**Conditional Capital IX**). The conditional capital increase serves to grant shares to the holders or creditors of bonds or participation rights, such shares being issued by the Company, or a Group company within the meaning of section 18 AktG, in which the Company directly and/or indirectly holds an interest of at least 90%, until May 14, 2024 on the basis of the authorization resolution of the General Shareholders' Meeting dated May 15, 2019 if option or conversion rights are exercised, if option or conversion obligations are performed or if the Company exercises its optional right to deliver shares of the Company instead of payment of the cash amount due (or parts thereof). The new shares are issued at the respective option or conversion price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is only to be implemented if bonds or participation rights are issued in accordance with the authorization resolution of the General Shareholders' Meeting dated May 15, 2019, and only to the extent that

- option or conversion rights are exercised or
- holders or creditors of bonds or participation rights who are under an obligation to exercise an option or under a conversion obligation perform their obligation to exercise the option or their conversion obligation or
- the Company exercises its optional right to deliver shares of the Company instead of paying the cash amount due (or parts thereof)

and to the extent that no cash settlement is granted and no shares from an authorized capital, treasury shares or shares of another listed company are delivered. The new shares issued carry dividend rights from the beginning of the fiscal year in which they are issued. The Executive Board is authorized, as far as legally permissible and with the consent of the Supervisory Board, to determine that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall carry dividend rights from the beginning of the fiscal year immediately preceding the year of issue.

The Executive Board is also authorized, with the consent of the Supervisory Board, to determine the further details concerning the implementation of the conditional capital increase.

Conditional Capital X

The share capital is conditionally increased by up to EUR 14,468,610.00 by means of issuing up to 14,468,610 new non-par value registered shares (Conditional Capital X). The conditional capital increase serves to grant shares to the holders or creditors of bonds or participation rights issued by the Company, or a consolidated subsidiary in which the Company directly and/or indirectly holds an interest of at least a 90%, until May 14, 2024 on the basis of the authorization resolution of the General Shareholders' Meeting dated May 15, 2019 if option or conversion rights are exercised on bonds or participation rights, if option or conversion obligations are performed or if the Company exercises its optional right to deliver shares of the Company instead of payment of the cash amount due (or parts thereof). The new shares are issued at the respective option or conversion price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is only to be implemented if bonds or participation rights are issued in accordance with the authorization resolution of the General Shareholders' Meeting dated May 15, 2019, and only to the extent that

- option or conversion rights are exercised or
- holders or creditors of bonds or participation rights who are under an obligation to exercise an option or under a conversion obligation perform their obligation to exercise the option or their conversion obligation or
- the Company exercises its optional right to deliver shares of the Company instead of paying the cash amount due (or parts thereof)

and to the extent that no cash settlement is granted and no shares from an authorized capital, treasury shares or shares of another listed company are delivered. The new shares issued carry dividend rights from the beginning of the fiscal year in which they are issued. The Executive Board is authorized, as far as legally permissible and with the consent of the Supervisory Board, to determine that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall carry dividend rights from the beginning of the fiscal year immediately preceding the year of issue.

The Executive Board is also authorized, with the consent of the Supervisory Board, to determine the further details concerning the implementation of the conditional capital increase.

In the reporting year, no shares have been issued from Conditional Capital X.

Conditional Capital XI

The share capital is conditionally increased by up to EUR 1,000,000.00 by means of issuing up to 1,000,000 new non-par value registered shares (**Conditional Capital XI**). The conditional capital increase serves to grant or issue shares to members of the Executive Board of the Company, to members of the management of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG and to employees of the Company and of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG who exercise the subscription rights they were granted prior to the end of April 30, 2018 pursuant to the authorization resolution of the General Shareholders' Meeting dated May 25, 2016 (Stock Option Program 16–18). The new shares are issued against payment by the beneficiary to the Company of the respective exercise price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is to be implemented only if subscription rights are issued in accordance with the authorization resolution on the Company's Stock Option Program 16–18 by the General Shareholders' Meeting dated May 25, 2016 and only to the extent that the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares issued carry dividend rights from the beginning of the fiscal year in which they are created. The Executive Board may determine, as far as legally permissible and with the consent of the Supervisory Board, that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall be entitled to dividends from the beginning of the fiscal year immediately preceding the year of issue; if the new shares are issued to members of the Executive Board, the Supervisory Board is authorized to do so.

Between 2016 and 2018 the maximum permitted number of share options were issued based on Conditional Capital XI. In accordance with the terms and conditions of the stock option program, no new shares can be created upon exercise of these stock options before October 2020.

Conditional Capital XII

The share capital is conditionally increased by up to EUR 1,000,000.00 by means of issuing up to 1,000,000 new non-par value registered shares (**Conditional Capital XII**). The conditional capital increase serves to grant or issue shares to members of the Executive Board of the Company, to members of the management of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG and to employees of the Company and of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG who exercise the subscription rights they were granted prior to the end of April 30, 2019 pursuant to the authorization resolution of the General Shareholders' Meeting dated May 30, 2017 (Stock Option Program 17–19). The new shares are issued against payment by the beneficiary to the Company of the respective exercise price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is to be implemented only if subscription rights are issued in accordance with the authorization resolution on the Company's Stock Option Program 17-19 by the General Shareholders' Meeting dated May 30, 2017 and only to the extent that the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares issued carry dividend rights from the beginning of the fiscal year in which they are created. The Executive Board may determine, as far as legally permissible and with the consent of the Supervisory Board, that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall be entitled to dividends from the beginning of the fiscal year immediately preceding the year of issue; if the new shares are issued to members of the Executive Board, the Supervisory Board is authorized to do so.

Between 2017 and 2019 the maximum permitted number of share options were issued based on Conditional Capital XII. In accordance with the terms and conditions of the stock option program, no new shares can be created upon exercise of these stock options before April 2022.

Conditional Capital XIII

The share capital is conditionally increased by up to EUR 1,000,000.00 by means of issuing up to 1,000,000 new non-par value registered shares (Conditional Capital XIII). The conditional capital increase serves to grant or issue shares to members of the Executive Board of the Company, to members of the management of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG and to employees of the Company and of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG who exercise the subscription rights they were granted prior to the end of May 31, 2021 pursuant to the authorization resolution of the General Shareholders' Meeting dated May 15, 2019 (Stock Option Program 19-21). The new shares are issued against payment by the beneficiary to the Company of the respective exercise price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is to be implemented only if subscription rights are issued in accordance with the authorization resolution on the Company's Stock Option Program 19-21 by the General Shareholders' Meeting dated May 15, 2019 and only to the extent that the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares issued carry dividend rights from the beginning of the fiscal year in which they are created. The Executive Board may determine, as far as legally permissible and with the consent of the Supervisory Board, that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall be entitled to dividends from the beginning of the fiscal year immediately preceding the year of issue; if the new shares are issued to members of the Executive Board, the Supervisory Board is authorized to do so.

The Supervisory Board is also authorized to determine the further details concerning the implementation of the conditional capital increase where the granting of subscription rights to members of the Executive Board is concerned. In all other cases, the Executive Board is authorized to determine such details.

No stock options had yet been granted on the basis of Conditional Capital XIII in 2019.

21 CAPITAL RESERVE

The capital reserve comprises the premiums arising on the issuance of shares and the expenses relating to the issuance of shares, as well as expenses from the issue of stock options to Executive Board and staff members. The capital reserve increased in total from EUR 68,802 thousand as of December 31, 2018 to EUR 69,251 thousand as of December 31, 2019. An increase of EUR 826 thousand was attributable to the capital increase in the November of the reporting period through issuing new shares from authorized capital. At the same time, however, the reserve amount was reduced by EUR 1,250 thousand due to the costs of creating the new shares in this transaction. An increase of EUR 873 thousand was attributable to the issuance of stock options to Executive Board and staff members (2018: EUR 1,151 thousand).

22 RETAINED EARNINGS

Retained earnings decreased from EUR -73,115 thousand as of December 31, 2018, to EUR -85,807 thousand as of December 31, 2019 due to the transfer of the Company's net loss for 2018.

23 OTHER COMPREHENSIVE INCOME

The other comprehensive income includes unrealized gains and/or losses on marketable securities and exchange rate differences from the remeasurement of the results and the financial position of the Company's subsidiary whose financial statements were prepared in U.S. dollars. The actual disposal of remeasured financial assets and/or liabilities leads to a recognition of the cumulated revaluation differences through profit or loss.

EUR thousand	Dec. 31, 2018	Dec. 31, 2019
January 1	169	-404
– Remeasurement of marketable securities	-252	228
– Exchange rate differences	-321	-147
December 31	-404	-323

24 CAPITAL MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern while maximizing the long-term return to stakeholders. An optimization of the debt/equity ratio is always considered.

The current liabilities, cash and cash equivalents, the marketable securities and equity attributable to equity holders, comprising subscribed capital, capital reserve (including offset retained earnings) and other comprehensive income are subject to the Group's capital management.

In the reporting period, the Group's equity ratio declined from 85.3% as of December 31, 2018 to 68.8% as of December 31, 2019.

The Company is not subject to any statutory capital requirements. However, the Company is obliged to issue new shares in connection with granted option rights from its existing stock option programs.

25 PROVISIONS

Statement of changes in provisions:

EUR thousand	Contract-related provisions	Payroll provisions	Provisions for claims from phantom stock rights	Other provisions	Total
Jan. 1, 2018	50	385	647	64	1,146
thereof non-current	*0*	*0*	*0*	*43*	*43*
Utilizations	0	-382	-73	-21	-476
Reversals	0	0	-554	0	-554
Additions	0	876	0	17	893
Dec. 31, 2018	50	879	20	60	1,009
thereof non-current	*0*	*0*	*0*	*47*	*47*
Utilizations	0	-879	0	-11	-890
Reversals	-50	-19	-20	-8	-97
Additions	0	84	0	538	622
Dec. 31, 2019	0	65	0	579	644
thereof non-current	*0*	*0*	*0*	*44*	*44*

Payroll provisions were recognized for obligations from bonus commitments to management and employees of the Company. These provisions may in individual cases also be utilized beyond a twelve-month time frame.

Provisions for claims from phantom stock rights (PSRs) were recognized based on the fair value of all issued and outstanding rights resulting from the Company's phantom stock programs (PSPs).

Other provisions were recognized for various operating obligations which were uncertain as of the reporting date with respect to their exact amounts and/or timing. A utilization of both of these categories of provisions is largely expected within the next twelve months.

26 TRADE PAYABLES

The reported trade payables in the amount of EUR 1,430 thousand as of the balance sheet date (December 31, 2018: EUR 1,411 thousand) are all non-interest-bearing. The total amount comprises exclusively non-derivative financial liabilities that are due in full within two months following the reporting date.

27 OTHER LIABILITIES

EUR thousand	Dec. 31, 2018	Dec. 31, 2019
Payables due to staff	512	1,089
Accrued audit fees	127	127
Payables due to tax authorities	100	69
Deferred income	27	46
Payables to supervisory board members	0	31
Other	5	6
Total other liabilities	771	1,368

The reported other liabilities are exclusively non-interest-bearing. They comprise non-derivative financial liabilities amounting to EUR 851 thousand that are due exclusively within two months following the reporting date.

28 MATURITIES OF FINANCIAL LIABILITIES

The following table showing the maturities of the Company's financial liabilities based on undiscounted contractually agreed cash flows as of December 31, 2019.

EUR thousand	up to 3 months	3 to 12 months	1 to 5 years	over 5 years	Total
Trade payables	1,430	0	0	0	1,430
Liabilities from leasing contracts	67	204	631	167	1,069
Other financial liabilities	804	0	0	0	804
Total	2,301	204	631	167	3,303

29 FINANCIAL INSTRUMENTS AND FINANCIAL LIABILITIES FROM FINANCING ACTIVITIES

Primary financial instruments			as of Dec 31, 2018		as of Dec 12, 2019	
EUR thousand	Measurement principle	Fair value hierarchy level	Carrying amount	Fair value	Carrying amount	Fair value
Assets						
Marketable securities	FVOCI	1	*653*	*653*	880	880
Cash and cash equivalents	AC		16,487	16,487	10,155	10,155

AC = measured at amortized cost

FVOCI = measured at fair value through other comprehensive income

Net liabilities from financing activities				Non-cash changes			
EUR thousand	Note	Jan 1, 2019	Cash flows	Offset against equity	Recognized in profit or loss	Other changes	Dec 31, 2019
Prepayments for financing projects	19	0	0	0	0	0	0
Trade payables	26	171	-171	431	0	0	431
Non-current liabilities from leasing contrancs	28	0	0	0	0	697	697
Current liabilities from leasing contracts	28	0	-290	0	-264	773	216
Net liabilities from financing activities		171	-461	431	-264	1,470	1,344

Cash consists of bank deposits and cash in hand. Cash equivalents are defined as instruments convertible to a known amount of cash on a short-term basis and carrying a very low risk of changes in value. As of the balance sheet date, the Company's cash and cash equivalents balance sheet item comprised exclusively cash. For the cash flow consolidation of the U.S. subsidiary, the operating assets and liabilities (excluding cash and cash equivalents) were translated at the average monthly exchange rates.

30 OPERATING ACTIVITIES

Cash flow from operating activities is derived indirectly on the basis of the net profit/loss for the year.

31 INVESTING ACTIVITIES

Cash flow from investing activities is calculated based on actual payments.

Proceeds from investment grants received of EUR 0 thousand (2018: EUR 813 thousand) were used for the development of fixed assets.

32 FINANCING ACTIVITIES

Cash flow from financing activities is calculated based on actual payments.

Gross proceeds from the issue of new shares in the amount of EUR 8,332 thousand in the reporting year (2018: EUR 21,253 thousand) related to the Company's capital increase from authorized capital in 2019. The cash outflow from financing activities amounted to EUR 983 thousand in 2019 (2018: EUR 1,959 thousand) and related mainly to the above-mentioned capital increase. EUR 229 thousand was paid out for leases (2018: EUR 0).

33 CASH CONSUMPTION

Cash flow from operating activities and cash flow from investing activities less transactions in securities is monitored by the Company as "cash consumption".

EUR thousand	2018	2019
Cash flow from operating activities	-10,351	-13,506
Cash flow from investing activities	724	47
Net proceeds from transactions in securities	0	0
Cash consumption	-9,627	-13,459

34 GENERAL

For a comprehensive overview of the risks the Company is facing, please refer to the "Report on opportunities and risks" section of the Group management report 2019 and to the securities prospectus for the offering of new shares as part of the capital increase carried out by the Company in November 2019. The prospectus is available on the website of Epigenomics AG at https://www.epigenomics.com/capital-increase-2019/.

35 LIQUIDITY RISK

The liquidity risk to which Epigenomics is exposed results from the Group's potential inability to meet its financial liabilities, i.e., not being able to pay its suppliers, creditors or lenders. It is therefore the task of cash and liquidity management to ensure the individual Group companies' liquidity at any time. The expected cash inflows and outflows are constantly monitored to ensure short-term liquidity. These activities are supported by internal cash forecasts and a corresponding strategy of managing time deposits with the Company's principal banks.

Furthermore, Epigenomics constantly monitors the capital markets and – if required – makes all necessary efforts to raise fresh capital in order to avoid illiquidity.

Epigenomics has strict cost management in place to avoid unnecessary spending. On the procurement side, the Company always tries to reduce purchase prices by closing favorable contracts and negotiating all relevant conditions and takes advantage of granted terms of payment.

36 FOREIGN CURRENCY EXCHANGE RISK

The Group executes transactions denominated in foreign currencies and is therefore exposed to the risk of exchange rate fluctuations. This risk is due on the one hand to the fact that the German parent company purchases some goods and services in U.S. dollars. On the other hand, Epigenomics markets its primary product – Epi proColon – in the U.S.A., and revenue is generated by the Group's U.S. subsidiary, Epigenomics, Inc., in U.S. dollars, while the kits are manufactured and billed to the contract manufacturer primarily in euros. This leads to an increased foreign currency exchange (FX) risk for the Group. This risk is reduced by utilizing the proceeds generated in U.S. dollars to finance the operating business activities of Epigenomics, Inc. (e.g., to purchase goods and services). With regard to U.S. dollar amounts in excess of the U.S. subsidiary's mid- to long-term cash requirements, the Group will constantly try to mitigate or to eliminate the remaining risk as far as possible, for example through the use of derivative financial instruments (e.g., forward contracts) to minimize this risk. As of the balance sheet date, there was only a very limited number and volume of items denominated in foreign currencies other than the U.S. dollar.

The following table shows the carrying amounts of the Group's foreign currency denominated monetary assets and liabilities:

EUR thousand	Dec. 31, 2018			Dec. 31, 2019		
Primary financial instruments	Total	thereof in USD	in %	Total	thereof in USD	in %
Trade receivables	164	130	79.6	89	78	88.2
Marketable securities	653	0	0.0	880	0	0.0
Cash and cash equivalents	16,487	163	1.0	10,155	3,099	30.5
Other current assets	71	39	54.9	124	21	16.6
Non-current lease liabilities	0	0	0.0	-696	-154	22.1
Trade payables	-1,411	-820	58.1	-1,430	-717	50.2
Current lease liabilities	0	0	0.0	-216	-141	65.4
Other current liabilities	-267	-28	10.5	-1,126	-247	21.9
Total net position	15,695	-515	-3.3	7,779	1,939	24.9
** thereof in third currencies*	*0*					

The sensitivity of the Group's net result and of shareholders' equity to foreign currency exchange rate fluctuations is shown in the table below:

EUR thousand Scenario	Impact on	2018	2019
10% increase in the EUR/USD rate	Total comprehensive income	41	-157
	Equity	749	1,425
10% decrease in the EUR/USD rate	Total comprehensive income	-50	192
	Equity	-916	-1,741

The table shows a stronger impact of exchange rate fluctuations on equity in the reporting year than in fiscal year 2018. This is mainly attributable to a significant increase in cash held in U.S. dollars in the balance sheet.

37 CREDIT RISK

Credit risk is the risk that a counterparty will fail to meet its obligations under a financial instrument or customer contract, resulting in a financial loss. The Company is routinely exposed to credit risk arising in its business and investment activities. It also affects deposits at banks and other financial institutions, and other financial instruments.

The Company holds its liquid assets at three different banks, thereby reducing the credit risk with respect to bank deposits.

Securities have only been acquired under careful adherence to the Company's investment policy, i.e., a strict selection by the credit ratings of the issuers has been conducted. However, the global financial crises in recent years have shown that even top-rated issuers can suddenly find themselves in a precarious situation or even facing collapse. Additionally, it has become clear that there is a constant risk of illiquid markets.

Customer-related credit risk is managed both centrally and at the level of the respective Group entity responsible for managing the relevant customer relationships. Monitoring covers receivables outstanding from customers and the order volume. The Group currently assesses risk concentrations in relation to trade receivables and receivables due under contracts as low, since on the one hand these are mainly due from well-known business partners with impeccable credit ratings, and on the other only immaterial volumes are due from small clients (primarily laboratories, clinics and universities). Whenever possible, payments are collected upfront. The Company maintains a long-standing, good contractual relationship with its major partners. It obtains collateral from its customers in specific cases.

To estimate potential credit losses, trade receivables and open order backlogs are grouped together according to common credit risk characteristics (e.g., existing default in days).

The expected rates of loss are based on customers' payment profiles, as measured by sales over a period of at least 12 months before the end of each reporting period and the corresponding historical credit losses that have arisen during that period. Historical rates of loss are adjusted where necessary to reflect current and forward-looking information about macroeconomic factors affecting customers' ability to pay debts as they fall due. Based on these criteria, the Company's customer base exhibits extremely low credit risk and the Company assumes that the economic situation in the U.S.A., China and Europe will remain robust, particularly with regard to the healthcare sector. The expected default rate for trade receivables and contract assets currently amounts to 0%.

38 INTEREST RATE RISK

The Group holds interest-bearing financial instruments only in the form of marketable securities.

Given the historically low interest rates on the international capital markets, the Group is currently not exposed to any interest rate risks from its cash and cash equivalents item.

39 DESCRIPTION OF STOCK OPTION PROGRAMS

As of the balance sheet date, the Company had the following stock option programs (SOPs) in place:

Both the SOP 09–13 and SOP 11–15 programs have expired. Stock options can no longer be granted from these programs or from SOP 16–17 and SOP 17–19.

On May 25, 2016, the General Shareholders' Meeting resolved to implement a new stock option program (SOP 16–18) based on the new Conditional Capital XI (see also note 20 "Share Categories and Capital Structure"). Under this program, the Executive Board and the Supervisory Board of the Company were authorized, until the end of April 30, 2018, to issue stock options in accordance with the provisions set forth below to members of the Executive Board and to employees of the Company as well as to members of the management and to employees of domestic and foreign dependent companies of the Company provided that each stock option so issued entitles the beneficiary to subscribe for one non-par value registered share of the Company. Under this authorization, the Executive Board and the Supervisory Board have issued the maximum number of stock options, a total of 1,000,000, which entitle the beneficiaries to subscribe for no more than 1,000,000 non-par value registered shares of the Company.

The beneficiaries were the members of the Executive Board of the Company (group 1), the employees of the Company (group 2), the members of the management of subordinated Group companies (group 3) and the employees of subordinated Group companies (group 4).

The subscription rights may only be exercised outside the blackout periods. Blackout periods means the periods between the end of the fiscal year and the publication of the annual report and the consolidated financial statements for the respective fiscal year, and between the end of the first, second and third quarters of a fiscal year and the publication of a quarterly report or a quarterly announcement of the Company for the respective quarter.

A quarter of the subscription rights in every tranche shall vest for the beneficiaries one year, two years, three years and four years, respectively, after the issue date of the respective tranche. In deviation from the above provision, the Supervisory Board may declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 1 beneficiaries, and the Executive Board may with the consent of the Supervisory Board declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 2 to 4 beneficiaries, at any time after the issue date of the respective tranche. In this case, the subscription rights shall be deemed vested upon receipt by the respective beneficiary of the corresponding declaration by the Executive Board or the Supervisory Board.

Subscription rights of each tranche can be exercised for the first time after their vesting and after expiration of the waiting period. The waiting period ends four years after the issue date of the tranche. The restriction of the exercise of the subscription rights to certain exercise periods and subject to compliance with all exercise conditions shall remain unaffected by the expiration of the waiting period.

The term of the subscription rights of every tranche starts on the issue date of the subscription rights and ends seven years after such issue date. Subscription rights that have not been exercised by the end of their term shall expire without compensation. This shall also apply where the non-exercise of the subscription rights is attributable to the fact that they could not be exercised, and shall also apply to vested subscription rights.

The subscription rights can only be exercised against payment of the exercise price to the Company. The exercise price for a subscription right of the respective tranche equals the non-volume weighted average stock exchange closing price of the shares of the Company on the ten stock exchange trading days preceding the issue date of the tranche in the electronic trading system of the Frankfurt Stock Exchange plus 10%.

After vesting has occurred and after the waiting period has expired, subscription rights may be exercised only if the closing stock exchange price of the shares of the Company in the electronic trading system of the Frankfurt Stock Exchange has exceeded the original price by at least 10% on at least one trading day in the period between the issue date of the tranche and the expiration of the waiting period (performance target). If the performance target has not been reached upon expiration of the waiting period, the subscription rights shall expire without compensation.

Any subscription rights of a beneficiary that have not yet vested shall expire without compensation upon termination of the service or employment contract between the beneficiary and the Company (or a subordinated Group company) if the service or employment contract has been terminated by the beneficiary, or by the Company (or the respective subordinated Group company) for cause. This shall not apply to any termination by group 1 or group 3 beneficiaries on account of a vote of no confidence by the General Shareholders' Meeting. Subscription rights of a beneficiary that have vested but have not yet been exercised or could not yet be exercised by the respective beneficiary shall expire without compensation upon termination of the service or employment contract between the beneficiary and the Company (or a subordinated Group company) if the service or employment contract has been terminated by the Company (or the respective subordinated Group company) for cause. This shall not apply to any termination by group 1 or group 3 beneficiaries on account of a vote of no confidence by the General Shareholders' Meeting.

The Executive Board or, in the case of group 1 beneficiaries, the Supervisory Board, may reserve the right to fulfill subscription rights that have been validly exercised by paying to the beneficiary compensation in cash instead of delivering any newly issued or previously acquired treasury shares of the Company. Such cash compensation shall equal the difference between the exercise price and the closing price of the shares of the Company last determined in the electronic trading system of the Frankfurt Stock Exchange before the exercise of the subscription right. However, the Company has no obligation to offer cash compensation for exercised subscription rights and does not currently intend to offer such cash compensation for exercised subscription rights.

For further details on SOP 16–18, please see the invitation to the General Shareholders' Meeting on May 25, 2016. The document is available on the Company’s website (www.epigenomics.com).

On May 30, 2017, the General Shareholders' Meeting resolved to implement a new stock option program (SOP 17–19) based on the new Conditional Capital XII (see also the section "Share Categories and Capital Structure"). Under this program, the Executive Board and the Supervisory Board of the Company were authorized, until the end of May 31, 2019, to issue stock options in accordance with the provisions set forth below to members of the Executive Board and to employees of the Company as well as to members of the management and to employees of domestic and foreign dependent companies of the Company provided that each stock option so issued entitles the beneficiary to subscribe for one non-par value registered share of the Company. Under this authorization, the Executive Board and the Supervisory Board may issue a total of up to 1,000,000 stock options which entitle the beneficiaries to subscribe for no more than 1,000,000 non-par value registered shares of the Company. Only the Supervisory Board of the Company is authorized to issue stock options to beneficiaries who are members of the Executive Board of the Company. In all other respects, the Executive Board is authorized to grant stock options, with the Executive Board being required to obtain the Supervisory Board’s consent before granting stock options to holders of a general power of attorney (*Prokura*) of the Company and to members of the management of subordinated Group companies. The shareholders have no subscription rights.

The beneficiaries are the members of the Executive Board of the Company and members of the management of subordinated Group companies (group 1) and the employees of the Company and of subordinated Group companies (group 2). From the total volume of SOP 17–19, the distribution shall be as follows:

- Group 1 all beneficiaries: max. 68% or 680,000 stock options
- Group 2 all beneficiaries: max. 32% or 320,000 stock options

The subscription rights may only be exercised outside the blackout periods.

A quarter of the subscription rights in every tranche shall vest for the beneficiaries one year, two years, three years and four years, respectively, after the issue date of the respective tranche. In deviation from the above provision, the Supervisory Board may declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 1 beneficiaries, and the Executive Board may with the consent of the Supervisory Board declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 2 beneficiaries, at any time after the issue date of the respective tranche. In this case, the subscription rights shall be deemed vested upon receipt by the respective beneficiary of the corresponding declaration by the Executive Board or the Supervisory Board.

Otherwise, the same terms of SOP 16–18 apply to the term, exercise and expiration of the subscription rights under the SOP 17–19.

For further details on SOP 17–19, please see the invitation to the General Shareholders' Meeting on May 30, 2017. The document is available on the Company's website (www.epigenomics.com).

On May 15, 2019, the General Shareholders' Meeting resolved to implement a new stock option program (SOP 19-21) based on the new Conditional Capital XIII (see also the section "Share Categories and Capital Structure"). Under this program, the Executive Board and the Supervisory Board of the Company were authorized, until the end of May 31, 2021, to issue stock options in accordance with the provisions set forth below to members of the Executive Board and to employees of the Company as well as to members of the management and to employees of domestic and foreign dependent companies of the Company provided that each stock option so issued entitles the beneficiary to subscribe for one non-par value registered share of the Company. Under this authorization, the Executive Board and the Supervisory Board may issue a total of up to 1,000,000 stock options which entitle the beneficiaries to subscribe for no more than 1,000,000 non-par value registered shares of the Company. Only the Supervisory Board of the Company is authorized to issue stock options to beneficiaries who are members of the Executive Board of the Company. In all other respects, the Executive Board is authorized to grant stock options, with the Executive Board being required to obtain the Supervisory Board's consent before granting stock options to holders of a general power of attorney (*Prokura*) of the Company and to members of the management of subordinated Group companies. The shareholders have no subscription rights.

The beneficiaries are the members of the Executive Board of the Company and members of the management of subordinated Group companies (group 1) and the employees of the Company and of subordinated Group companies (group 2). From the total volume of SOP 19–21, the distribution shall be as follows:

- Group 1 all beneficiaries: max. 68% or 680,000 stock options
- Group 2 all beneficiaries: max. 32% or 320,000 stock options

Stock options from the SOP 19–21 may still be issued as of April 1, 2020, October 1, 2020 and April 1, 2021. The subscription rights may only be exercised outside the blackout periods.

A quarter of the subscription rights in every tranche shall vest for the beneficiaries one year, two years, three years and four years, respectively, after the issue date of the respective tranche. In deviation from the above provision, the Supervisory Board may declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 1 beneficiaries, and the Executive Board may with the consent of the Supervisory Board declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 2 beneficiaries, at any time after the issue date of the respective tranche. In this case, the subscription rights shall be deemed vested upon receipt by the respective beneficiary of the corresponding declaration by the Executive Board or the Supervisory Board.

Otherwise, the same terms of SOP 16–18 and SOP 17–19 apply to the term, exercise and expiration of the subscription rights under the SOP 19–21.

For further details on SOP 19–21, please see the invitation to the General Shareholders' Meeting on May 15, 2019 and the amended resolution proposals of the Executive Board and Supervisory Board. These documents are available on the Company's website at (www.epigenomics.com).

40 STOCK OPTION PROGRAMS – OUTSTANDING RIGHTS

SOP 09–13 expired during the year, meaning that no rights were still outstanding as of December 31, 2018. None of these rights were held by members of the Company's Executive Board.

No rights under SOP 16–18, 17–19 and 19–21 expired or were exercised with in the reporting year or in the previous year. No rights were issued under SOP 19–21.

SOP 16–18	Options outstanding as of Jan. 1, 2019	Issued	Forfeited	Reclassified	Options outstanding as of Dec. 31, 2019	Options exercisable as of Dec. 31, 2019
Option holder	(2018)	Options in 2019 (2018)			(2018)	(2018)
Greg Hamilton (CEO)	227,500	0	0	0	227,500	0
	(160,000)	(67,500)	(0)	(0)	(227,500)	(0)
Albert Weber (EVP Finance)	30,000	0	0	0	30,000	0
	(30,000)	(0)	(0)	(0)	(30,000)	(0)

Dr. Uwe Staub (COO) until 3/31/2018	n/a	n/a	n/a	n/a	n/a	0
	(22,500)	(0)	(0)	(-22,500)	(n/a)	(0)
Other option holders	690,250	0	50,000	0	640,250	0
	(455,250)	(298,750)	(56,250)	(-7,500)	(690,250)	(0)
All option holders	947,750	0	50,000	0	897,750	0
	(667,750)	(366,250)	(56,250)	(-30,000)	(947,750)	(0)
Average exercise price (in EUR)	4.86	n/a	4.37	n/a	4.85	n/a
	(5.22)	(4.12)	(4.80)	(n/a)	(4.86)	(n/a)

SOP 17-19	Options outstanding as of Jan. 1, 2019	Issued	Forfeited	Exercised	Options outstanding as of Dec. 31, 2019	Options exercisable as of Dec. 31, 2019
Option holder	(2018)	Options in 2019 (2018)			(2018)	(2018)
Greg Hamilton (CEO)	64,080	100,000	0	0	164,080	0
	(31,580)	(32,500)	(0)	(0)	(64,080)	(0)
Jorge Garces (COO)	85,000	85,000	0	0	170,000	0
	(0)	(85,000)	(0)	(0)	(85,000)	(0)
Albert Weber (EVP Finance)	70,000	70,000	0	0	140,000	0
	(0)	(70,000)	(0)	(0)	(70,000)	(0)
Other option holders	174,750	356,170	29,075	0	501,845	0
	(51,000)	(131,250)	(7,500)	(0)	(174,750)	(0)
All option holders	393,830	611,170	29,075	0	975,925	0
	(82,580)	(318,750)	(7,500)	(0)	(393,830)	(0)
Average exercise price (in EUR)	4.33	1.92	1.92	n/a	2.88	n/a
	(5.10)	(4.12)	(4.12)	(n/a)	(4.33)	(n/a)

Contractual commitments to a total of 170,000 further rights were made to members of the Executive Board for award to them in 2020, provided they are then available from the active SOP.

Terms of outstanding stock options of all programs:

Term	Weighted average exercise price (in EUR) Dec. 31, 2018	Stock options issued and outstanding Dec. 31, 2018	Weighted average exercise price (in EUR) Dec. 31, 2019	Stock options issued and outstanding Dec. 31, 2019
2023	5.43	232,830	5.43	232,830
2024	5.10	487,500	5.10	436,250
2025	4.12	621,250	4.12	615,625
2026	1.92	0	1.92	588,970
Total	4.70	1,341,580	3.67	1,873,675

41 STOCK OPTION PROGRAMS – VALUATION PARAMETERS

The fair value of SOP 16–18 and SOP 17–19 was determined using the Monte Carlo simulation. It was assumed that the rights will be exercised in the fifth year after the grant date if the market price of the shares exceeds the exercise price of the stock option rights by more than 20% or in the sixth year after the grant date if the market price of the shares exceeds the exercise price of the stock option rights by more than 10%. An earlier exercise of the rights is not permitted under the program terms and conditions.

The following table gives detailed information on both programs active over the balance sheet date and the applied valuation parameters.

	SOP 16–18		SOP 17–19	
	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019
Total number of outstanding options	947,750	897,750	393,830	975,925
thereof vested until end of term	226,270	451,082	20,645	117,853
thereof exercisable	0	0	0	0
Exercise prices (in EUR)	4.12–5.43	4.12–5.43	4.12–5.10	1.92-5.10
Weighted average term of outstanding rights in years	5.67	4.67	6.15	5.82
Weighted average fair value per option (EUR)	1.92	2.52	2.09	1.35
Applied share price volatility in %	84.32	84.31	84.25	80.38
Risk-free interest rate in %	-0.04	-0.04	0.13	-0.12
Assumed staff turnover in %	5.88	4.63	7.32	8.18
Expiry dates	Oct. 1, 2023 – Apr. 1, 2025	Oct. 1, 2023 – Apr. 1, 2025	Oct. 1, 2024 – Apr. 1, 2025	Oct. 1, 2024 – Apr. 1, 2026

The risk-free interest rates are derived from the yield curve of German government bonds at the valuation date. The volatility of the share price can be derived from the historical volatility of the shares (in accordance with Bloomberg data) over the most recent past period equaling the remaining term of the rights. For adjustment purposes, a constant staff turnover was assumed based on the historical turnover of the Company's staff over the past four years. No dividend payments were assumed during the term of the rights (i.e., the assumed dividend yield was 0%).

42 PHANTOM STOCK PROGRAMS – DESCRIPTION

As of the balance sheet date, the Company had four phantom stock programs (PSPs)/virtual share plans in place as an incentive scheme for management and staff by granting so-called phantom stock rights (PSRs) from such programs to the beneficiaries. The programs define a PSR as a conditional claim of its holder against the Company for a future payment in cash of a premium to the benefit of the holder. As PSRs will be settled in cash upon their exercise, the Company had to record a provision based on the fair values of the outstanding rights.

Phantom stock program 03–15 (PSP 03–15)

PSP 03–15 was established in 2013 to serve as a transformation tool for outstanding stock options at that time. Executive Board and Supervisory Board of the Company therefore had decided to offer PSRs from the PSP 03–15 to all stock option holders who were employees or members of the Executive Board at that time and to a dedicated number of former employees of the Company who still held stock options. For each stock option right returned to the Company in connection with an exchange offer, one PSR from PSP 03–15 was granted to its holder. Each PSR from PSP 03–15 became the legal successor of the returned stock option right then and was on equal terms with its economic value. Hence, the term of each PSR from PSP 03–15 equals the remaining term of the returned stock option right. These PSRs will expire without compensation at that point in time when the stock option right that has been returned in exchange would have expired. After the exchange of previously unvested stock option rights against PSRs, the vesting rules of the underlying SOPs applied equally with respect to the vesting of the PSRs. PSRs which were issued in exchange for vested stock options also vested immediately. Vested PSRs obtained in exchange for stock options from the SOP 06–10 can be exercised immediately. Vested PSRs obtained in exchange for stock options from SOP 09–13 and SOP 11–15 can only be exercised when the holding or waiting period of the stock options returned in exchange is or would have expired for its holder.

The exercise price of a PSR from PSP 03–15 equals the exercise price of the stock option right returned in exchange. The exercise of such a PSR simulates the exercise of the former stock option right in a so-called "ExerSale" transaction. Unlike the exercise of stock option rights, the holder of a PSR is not entitled to subscribe to a share of the Company by exercising a PSR. Upon the exercise of a PSR from PSP 03–15, the holder of the right obtains a claim against the Company for the payment of the PSR premium. The PSR premium is defined as the absolute difference between the then-current market price for Epigenomics shares and the exercise price of the PSR. Holders of PSRs are entitled to exercise their right during the exercise period when the strike price at the exercise date is higher than the base value. The strike price equals the arithmetic average of the Xetra closing rates for Epigenomics shares on the Frankfurt Stock Exchange on the five consecutive trading days prior to the exercise date. By exercising the PSR, the holder earns an entitlement to obtain the “PSR premium” from the Company. The PSR premium equals the absolute difference between strike price and base value of the right without any limitation. In contrast to the exercise of stock option rights, the exercise of PSRs is not compulsory subject to pre-defined exercise periods ("trading windows") and can be done at any time during the year. Nevertheless, the Executive Board and the Supervisory Board may stipulate compulsory exercise periods for holders of PSRs who are current employees of the Company. This applies in particular to holders of PSRs who are identified as "insiders" within the meaning of the German Securities Trading Act (*Wertpapierhandelsgesetz* – WpHG). It is left to the sole discretion of the Company's Executive Board to define and announce such exercise periods to the employees of the Company holding PSRs. Such exercise periods as determined by the Executive Board will then always apply simultaneously to the Executive Board members.

A takeover or a mandatory offer for the shares of the Company in accordance with the German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz* – WpÜG) entitles the holders of vested PSRs to exercise these rights in full. This also applies if the waiting period for these rights has not yet expired. The exercise right for the PSR holder shall apply only if the offered consideration consists solely of a cash settlement and if the bidder has gained control over the Company. In the event of a takeover, the PSR premium equals the difference between the cash amount which was finally offered to the shareholders as part of a takeover or a mandatory offer and the base value of the PSR.

Phantom stock program 2013 (PSP 2013), phantom stock program 2014 (PSP 2014), and phantom stock program 2015 (PSP 2015)

PSP 2013 was approved by the Executive Board and the Supervisory Board of the Company in May 2013. PSP 2014 was approved by the Executive Board and the Supervisory Board of the Company in May 2014. PSP 2015 was approved by the Executive Board and the Supervisory Board of the Company in September 2015.

No further rights can be issued from PSP 2013, PSP 2014, and PSP 2015. The eligible beneficiaries of these programs were the members of the Executive Board and Group employees with an unterminated service or employment agreement with a Group company. The Executive Board decided on issuing PSRs from these programs to employees of the Company and to executives and employees of the subsidiaries. The Supervisory Board decided on issuing PSRs to the members of the Executive Board.

A certain number of PSRs granted to a beneficiary at a certain point in time is defined as a tranche. The PSRs of each tranche issued to beneficiaries who were not members of the Company's Executive Board at the issuance date started to vest from the beginning of the first full calendar quarter over the three years following their issuance in five equal parts, beginning with the first day of the fifth full calendar quarter after the issuance of the tranche. Thereafter, the further four of the five parts each vest after the end of the following four half-years. Thus, the last of the five parts vests after the last day of the twelfth full calendar quarter following issuance of the tranche and therefore at the end of a three-year waiting period. PSRs of each tranche can only be exercised after their vesting, but not before the end of the waiting period. The term of the PSRs begins with their issuance and ends five years after the beginning of their vesting period. Rights not exercised upon the end of their term expire without compensation. PSRs can generally be exercised at any time in the two years between the end of their waiting period and the end of their term ("exercise period"). Nevertheless, the Executive Board and Supervisory Board can stipulate adherence to timing restrictions in the exercise periods. This applies in particular to holders of rights who are identified by the Executive Board as an "insider" within the meaning of Section 15b WpHG. The Executive Board of the Company reserves the right to establish such timing restrictions in the exercise periods and to announce such restrictions in the exercise periods to rights holders who are employees of the Company at that date. Timing restrictions in exercise periods as announced by the Executive Board will always apply simultaneously to PSRs held by the Executive Board members themselves.

At the issuance of a PSR tranche, a so-called "base value" of the rights was determined. This base value equaled the average of the Xetra closing rates for Epigenomics shares on the Frankfurt stock exchange on the last five trading days before issuance. Holders of PSRs are entitled to exercise their right during the exercise period when the strike price at the exercise date is higher than the base value. The strike price equals the arithmetic average of the Xetra closing rates for Epigenomics shares on the Frankfurt Stock Exchange on the five consecutive trading days prior to the exercise date. By exercising the PSR, the holder earns an entitlement to obtain the "PSR premium" from the Company. The PSR premium equals the absolute difference between the strike price and the base value of the right up to a maximum of EUR 8.00 (PSP 2013), EUR 12.00 (PSP 2014), or EUR 15.00 (PSP 2015).

Any PSRs held by a beneficiary that have not yet vested expire without compensation upon termination of the service or employment agreement by the beneficiary or if the service or employment agreement has been terminated by the Company for cause. Any PSRs held by a beneficiary that have not yet vested shall remain valid if the Company terminates the service or employment agreement due to operational reasons. If the service or employment agreement is terminated by mutual consent, it is left to the sole discretion of the Executive Board or the Supervisory Board to decide whether those PSRs held by the beneficiary that have not yet vested at that point in time remain valid. If holders of vested PSRs leave the Company before the expiry date of those rights, they remain entitled to such vested rights until the expiry date. In such case, the strike price of their rights from PSP 2014 and PSP 2015 will be limited to the arithmetic average of the Xetra closing rates on the Frankfurt stock exchange on the five consecutive trading days prior to the final termination date of their employment agreement with the Company.

A takeover or a mandatory offer for the shares of the Company in accordance with the WpÜG entitles the holders of vested PSRs to exercise these rights in full. This also applies if the waiting period for these rights has not yet expired. The exercise right for the PSR holder will only apply if the offered consideration consists solely of a cash settlement and if the bidder has gained control over the Company. In the event of a takeover, the PSR premium equals the difference between the cash amount which was finally offered to the shareholders as part of a takeover or a mandatory offer and the base value of the PSR. However, the limitation of the PSR premium to EUR 8.00 (PSP 2013), EUR 12.00 (PSP 2014), and EUR 15.00 (PSP 2015) will still apply in such case.

43 PHANTOM STOCK PROGRAMS – OUTSTANDING RIGHTS

No rights under the Company's PSPs were issued in the reporting year or in the previous year.

Phantom stock program 03–15 (PSP 03–15)

All rights under the program expired in the reporting period. The expired rights were not held by members of the Company's Executive Board. The program is thereby terminated.

Beneficiaries	Reporting year	Rights held as of Jan. 1	expired	Rights held as of Dec. 31
Dr. Uwe Staub (COO) - until March 31, 2018	2019	n/a	n/a	n/a
	2018	22,400	22,400	n/a
Other beneficiaries	2019	20,000	20,000	0
	2018	75,800	55,800	20,000
Total	2019	20,000	20,000	0
	2018	98,200	78,200	20,000
Average base value (EUR/right)	2019	2.51	2.51	n/a
	2018	5.98	6.87	2.51

Phantom stock program 2013 (PSP 2013)

No previously issued rights under PSP 2013 were forfeited either in the reporting year or in the previous year. All rights under the program expired in the reporting period. The expired rights were not held by members of the Company's Executive Board. The program is thereby terminated.

Beneficiaries	Reporting year	Rights held as of Jan. 1	expired	exercised	reclassified	Rights held as of Dec. 31
Dr. Uwe Staub (COO) - until March 31, 2018	2019	n/a	n/a	n/a	n/a	n/a
	2018	20,000	0	0	-20,000	n/a
Other beneficiaries	2019	23,000	23,000	0	0	0
	2018	78,000	10,000	65,000	20,000	23,000
Total	2019	23,000	23,000	0	0	0
	2018	98,000	10,000	65,000	20,000	23,000
Average base value (EUR/right)	2019	6.19	6.19	n/a	n/a	n/a
	2018	2.70	1.64	1.62	6.15	6.19

Phantom stock program 2014 (PSP 2014)

No previously issued rights under PSP 2014 were forfeited either in the reporting year or in the previous year. All rights under the program expired in the reporting period. 30,000 of the expired rights were held by members of the Company's Executive Board. The program is thereby terminated.

Beneficiaries	Reporting year	Rights held as of Jan. 1	expired	exercised	reclassified	Rights held as of Dec. 31
Albert Weber (EVP Finance)	2019	30,000	30,000	0	0	0
	2018	0	0	0	30,000	30,000
Dr. Uwe Staub (COO) - until March 31, 2018	2019	n/a	n/a	n/a	n/a	n/a
	2018	60,000	0	0	-60,000	n/a
Other beneficiaries	2019	224,833	224,833	0	0	0
	2018	263,833	0	69,000	30,000	224,833
Total	2019	254,833	254,833	0	0	0
	2018	323,833	0	69,000	0	254,833
Average base value (EUR/right)	2019	3.23	3.23	n/a	n/a	n/a
	2018	3.23	n/a	3.23	3.23	3.23

Phantom stock program 2015 (PSP 2015)

No previously issued rights under PSP 2015 expired or were forfeited or exercised either in the reporting year or in the previous year.

Beneficiaries	Reporting year	Rights held as of Jan. 1	reclassified	Rights held as of Dec. 31
Albert Weber (EVP Finance)	2019	10,000	0	10,000
	2018	0	10,000	10,000
Dr. Uwe Staub (COO) - until March 31, 2018	2019	n/a	n/a	n/a
	2018	14,400	-14,400	n/a
Other beneficiaries	2019	88,400	0	88,400
	2018	84,000	4,400	88,400
Total	2019	98,400	0	98,400
	2018	98,400	0	98,400
Average base value (EUR/right)	2019	5.05	n/a	5.05
	2018	5.05	5.05	5.05

44 PHANTOM STOCK PROGRAMS – VALUATION PARAMETERS

The fair value of all PSR was calculated by using the binomial approach based on the Cox-Ross-Rubinstein model. For PSP 03–15 it was assumed that the rights will be exercised after their waiting period if the market price of the shares exceeds the base value of the PSR by more than 10%. For PSP 2013, PSP 2014, and PSP 2015 it was assumed that the rights will be exercised in the fourth year after the grant date if the market price of the shares exceeds the base value of the PSR by more than 20% or in the fifth year after the grant date if the market price of the shares exceeds the base value of the PSR by more than 10%. An earlier exercise of the rights is not permitted under the program terms and conditions.

The following table gives detailed information on all programs and the applied valuation parameters.

	PSP 03–15		PSP 2013		PSP 2014		PSP 2015	
	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019
Total number of outstanding PSRs	20,000	0	23,000	0	254,833	0	98,400	98,400
thereof vested until end of term	20,000	0	23,000	0	254,833	0	98,400	98,400
thereof exercisable	20,000	0	23,000	0	254,833	0	98,400	98,400
Base value of PSR (in EUR)	2.51	n/a	6.15–6.45	n/a	3.23-3.70	n/a	5.05	5.05
Aggregate adjusted fair value of PSRs (in EUR thousand)	0	n/a	0	n/a	18	n/a	1	0
Aggregate maximum payments if PSRs are exercised (in EUR thousand)[1]	n/a	n/a	184	n/a	2,153	n/a	383	375
Weighted average term of outstanding rights (in years)	0	n/a	0.22	n/a	0.76	n/a	1.75	0.76
Weighted average fair value (EUR/PSR)	0	n/a	0	n/a	0.07	n/a	0.02	0.00
Applied share price volatility in %	27.12	n/a	31.11	n/a	78.04	n/a	66.61	38.58
Risk-free interest rate in %	-0.65	n/a	-0.80	n/a	-0.74	n/a	-0.63	-0.67
Assumed staff turnover in %	0.0	n/a	0.0	n/a	0.0	n/a	0.00	0.00
Expiry dates	Jan. 1, 2019	n/a	Jan. 1, 2019 – Apr. 1, 2019	n/a	Oct. 1, 2019	n/a	Oct. 1, 2020	Oct. 1, 2020

The risk-free interest rates are derived from the yield curve of German government bonds at the valuation date. The volatility of the share price can be derived from the historical volatility of the shares (in accordance with Bloomberg data) over the most recent past period equaling the remaining term of the rights. For adjustment purposes, a constant staff turnover was assumed based on the historical turnover of the Company's staff over the past three years. No dividend payments were assumed during the term of the rights (i.e., the assumed dividend yield was 0%).

The aggregate adjusted fair value of the rights granted under all programs amounted to EUR 0 thousand as of December 31, 2018 (December 31, 2018: EUR 20 thousand). This was recognized as a non-current provision of EUR 0 thousand and a current provision of EUR 0 thousand as of the balance sheet date.

[1] The aggregate maximum payment to be made by the Company upon exercise of all outstanding rights under PSP 03–15 cannot be calculated as the program does not provide for a cap on the PSR premium.

45 INFORMATION ON THE EXECUTIVE BOARD AND THE SUPERVISORY BOARD OF THE COMPANY AND THEIR REMUNERATION

In the reporting year, the Company's Executive Board consisted of Greg Hamilton as Chief Executive Officer, Jorge Garces, Ph.D., as Chief Scientific Officer and Albert Weber as Executive Vice President Finance.

The remuneration of the members of the Company's Executive Board comprises a fixed and a variable component. The variable amount is determined on the basis of a variety of criteria, including the achievement of individual performance targets and Company performance targets, which are set by the Supervisory Board on a yearly basis. Apart from the fixed and the variable component, a third remuneration component consists of a long-term performance-based compensation in the form of phantom stock rights (PSRs) and stock options. In addition, the Executive Board members are beneficiaries of a D&O insurance policy with excess set at the statutory minimum amount. They also receive full reimbursement of their business travel expenses and other incidental benefits detailed in the remuneration report section of the Group management report 2019.

In 2019, total remuneration of the members of the Executive Board based on the benefits granted amounted to EUR 2,031 thousand (2018: EUR 2,376 thousand) and comprised:

EUR thousand	2018	2019
Fixed remuneration	1,265	1,302
One-year variable remuneration	664	460
Multi-year variable remuneration	447	269
Total remuneration (granted benefits)	2,376	2,031

The multi-year variable compensation of the Executive Board members in 2019 comprised 255,000 stock options (2018: 255,000).

Based on the allocations (cash payments), the total remuneration of the members of the Executive Board in the reporting period amounted to EUR 1,966 thousand (2018: EUR 1,732 thousand) and comprised:

EUR thousand	2018	2019
Fixed remuneration	1,265	1,302
One-year variable remuneration	467	664
Multi-year variable remuneration	0	0
Total remuneration (allocations)	1,732	1,966

In the event of a change of control, all Executive Board members have a special right to terminate their service agreements and would in such case be entitled to receive payment of their fixed remuneration for the remaining term of their service agreements. In no case will such payment exceed 150% of the severance payment cap in accordance with section 4.2.3 of the German Corporate Governance Code.

The Supervisory Board of the Company comprised the following members in the reporting period: Heino von Prondzynski, Einsiedeln (Switzerland) as Chairman, Dr. Ann Clare Kessler, Rancho Santa Fe, CA (U.S.A.), and Prof. Günther Reiter, Pfullingen (Germany) as Deputy Chairman, Dr. Helge Lubenow, Langenfeld/Rheinland (Germany) and, from May 2019, Franz Thomas Walt, Flims-Dorf (Switzerland).

The remuneration structure for the Supervisory Board is based on an annual cash retainer ("fixed remuneration") and meeting-related payments ("variable remuneration"). The remuneration does not include any performance-related elements or long-term incentive components. In 2019, total remuneration of the members of the Supervisory Board amounted to EUR 281 thousand (2018: EUR 253 thousand) and comprised:

EUR thousand	2018	2019
Fixed remuneration	205	225
Variable remuneration	48	56
Total remuneration	253	281

Further details to the composition of the Executive Board and the Supervisory Board and details of the remuneration of their members in the reporting year can be found in the "Remuneration Report" section of the Group management report 2018.

46 OTHER FINANCIAL OBLIGATIONS

EUR thousand	Term < 1 year	Term 1–5 years
Financial obligations from licensing agreements	32	0
Financial obligations from operating rental, lease, maintenance and service agreements	23	9
Financial obligations from manufacturing orders	149	0
Financial obligations from the purchase of goods and services	476	12
Total financial obligations	680	21

47 INFORMATION ON THE COMPANY'S AUDITOR APPOINTED BY THE GENERAL SHAREHOLDERS' MEETING

At the Company's Annual General Shareholders' Meeting in May 2019, Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft was engaged to audit the Company's annual financial statements and consolidated financial statements for fiscal year 2019. During the reporting year, a total amount of EUR 198 thousand (2018: EUR 213 thousand) was expensed for miscellaneous services of this auditing firm for Epigenomics AG. Details are shown in the following table:

EUR thousand	**2018**	**2019**
Costs for audit services	126	118
Costs for other assurance services	87	80
Total	213	198

The costs disclosed for audit services relate to the audits of the separate financial statements of Epigenomics AG in accordance with German GAAP as well as the consolidated financial statements for the Epigenomics Group in accordance with IFRSs, and on reviews of the interim statements. The costs for other assurance services were incurred in connection with the Company's capital increase in November 2019.

48 DECLARATION OF THE EXECUTIVE BOARD AND THE SUPERVISORY BOARD OF EPIGENOMICS AG PURSUANT TO SECTION 161 AKTG ON THE GERMAN CORPORATE GOVERNANCE CODE

In October 2019, the Executive Board and the Supervisory Board of the Company issued an updated declaration of compliance pursuant to section 161 of the German Stock Corporation Act (*Aktiengesetz* – AktG). The declaration was published on the Company's website *(www.epigenomics.com/news-investors/corporate-governance/)*.

49 INFORMATION ON OTHER TRANSACTIONS WITH RELATED PARTIES

As of the reporting date, the Company's liabilities due to members of its Executive Board amounted to EUR 472 thousand December 31, 2018: EUR 120 thousand) and liabilities due to members of its Supervisory Board amounted to EUR 32 thousand (December 31, 2018: EUR 0 thousand). There were no other transactions with related parties during the reporting year.

50 REPORT ON POST-BALANCE SHEET DATE EVENTS

On February 29, 2020 – after the end of the reporting period – we have announced that the Centers for Medicare & Medicaid Services (CMS) have opened the National Coverage Determination (NCD) review of Epi proColon, Epigenomics' blood test for colorectal cancer screening. This means that according to the statutes, a decision on CMS's reimbursement of Epi proColon must be made within a maximum period of nine months. A positive CMS reimbursement decision would represent a major breakthrough for the company in the commercialization of Epi proColon in the U.S. market.

Due to the rapid international spread of the corona virus after the end of the reporting period and the resulting consequences for the global economy, Epigenomics also analyzed its own situation and took precautionary measures as far as possible. With regard to the supply chain, it can be noted that we have our products manufactured by certified manufacturers in Italy and California (U.S.A.). Production bottlenecks due to the Covid-19 pandemic are not foreseeable at this point in time (editorial deadline for the consolidated financial statements 2019). The Company also has inventories at several warehouses in Germany and the U.S.A., which guarantee delivery capability based on current business planning for the next six months. In addition, the Company will closely and promptly monitor further developments and, if necessary, take appropriate measures in order to be able to react to economically negative effects of the pandemic on the Company even at short notice. However, at the current time, the Company does not expect its planned sales to be affected in the long term. Should cost reductions and/or liquidity-saving measures become necessary due to further developments, the continuation of studies could be postponed and further savings potential identified. The utilization of governmental support measures in the context of the Covid 19 crisis is being examined at the time of preparation of these consolidated financial statements.

On March 31, 2020 – after the end of the reporting period – the Company announced that it has fully placed new shares from a capital increase resolved on March 30, 2020 of up to EUR 3,602,154.00 at a price of EUR 1.11 per new share. Accordingly, the Company's share capital will be increased from currently EUR 43,527,692.00 by EUR 3,602,154.00 to EUR 47,129,846.00 by issuing up to 3,602,154 new registered no par value shares of the Company against cash contributions. The gross proceeds from the capital increase amount to approximately EUR 4.0 million. Epigenomics AG intends to use the net proceeds from the capital increase primarily to finance its ongoing operations.

51 APPROVAL FOR PUBLICATION

On March 31, 2020, the Executive Board cleared the consolidated financial statements for submission to the Supervisory Board. The Supervisory Board is tasked with reviewing the consolidated financial statements and stating whether it approves them. The consolidated financial statements and annual financial statements of Epigenomics AG, and the annual report, will be approved at the Supervisory Board meeting on April 29, 2020 and published on the same day.

Berlin, March 31, 2020

The Executive Board

RESPONSIBILITY STATEMENT

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements 2019 give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Berlin, March 31, 2020

The Executive Board

LIST OF ABBREVIATIONS

ADR	American Depositary Receipts
AktG	German Stock Corporation Act
ARUP	ARUP Laboratories
CFDA	China Food and Drug Administration
CMS	Centers for Medicare & Medicaid Services
CPT	Current Procedural Terminology
CUSIP	Committee on Uniform Security Identification Procedures
EBIT	Earnings Before Interest and Tax
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortization
ERP	Enterprise Resource Planning
EU	European Union
ECB	European Central Bank
FDA	Food and Drug Administration
Fed	Federal Reserve System
FIT	Faecal Immunochemical Test
GDP	Gross Domestic Product
GMP	Good Manufacturing Practice
HGB	German Commercial Code
HPV	Human Papilloma Virus
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IDW	Institute of Public Auditors in Germany
IFRS	International Financial Reporting Standards
IKS	Internes Kontroll- und Risikomanagementsystem
IPO	Initial Public Offering
ISIN	International Securities Identification Number
ISO	International Organization for Standardization
IVD	In Vitro Diagnostic

KonTraG	German Corporate Control and Transparency Act
LDT	Laboratory Developed Test
M&A	Mergers & Acquisitions
NCD	National Coverage Determination
NGS	Next Generation Sequencing
OECD	Organisation for Economic Co-operation and Development
OTCQX	Over-the-counter stock exchange
PAL	Principal American Liaison
PCR	Polymerase Chain Reaction
PMA	Premarket Approval
PERT	Performance of proColon Repeated Testing in the Intended Use Population
PSP	Phantom Stock Program
PSR	Phantom Stock Right
R&D	Research & Development
Septin9	DNA methylation biomarkers, intellectual property by Epigenomics
SHOX2	DNA methylation biomarkers, intellectual property by Epigenomics
SOP	Stock Option Program
SOPs	Standard Operation Procedures
USPSTF	United States Preventive Services Task Force
WKN	Security Code Number
WpÜG	German Securities Acquisition and Takeover Act

INDEPENDENT AUDITOR'S REPORT

To the Epigenomics AG, Berlin

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

Audit opinions

We have audited the consolidated financial statements of Epigenomics AG and its subsidiaries (the Group), which comprise the consolidated balance sheet as at December 31, 2019, and the consolidated statement of comprehensive income (consolidated statement of profit or loss and other comprehensive income], consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from January 1, 2019 to December 31, 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the Group management report of Epigenomics AG for the financial year from January 1, 2019 to December 31, 2019. In accordance with the German legal requirements we have not audited the declaration on corporate governance and the compliance statement contained in the management report's section "Corporate governance".

In our opinion, on the basis of the knowledge obtained in the audit,

the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the ELI, and the additional requirements of German commercial law pursuant to Article 315e paragraph 1 HGB 8(Handelsgesetzbuch: German Commercial Code) and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at December 31, 2019, and of its financial performance for the financial year from January 1, 2019 to December 31, 2019, and

the accompanying Group management report as a whole provides an appropriate view of the Group's position. In all material respects, this Group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the Group management report does not cover the declaration on corporate governance and the compliance statement contained in the section "Corporate governance".

Pursuant to Article 322 paragraph 3 sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the Group management report.

Basis for the audit opinions

We conducted our audit of the consolidated financial statements and of the Group management report in accordance with Article 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany) (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the Group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the Group management report.

Material uncertainties in connection with the continuation as a going concern

We refer to the section "General principles" in the notes to the consolidated financial statements as well as the information in the section "Financial opportunities and risks" of the Group management report, where the legal representatives explain that with liquidity of EUR 11 million existing on the balance sheet date, in 2020 further capital measures or cost reduction measures are necessary in order to ensure going concern beyond the beginning of 2021. A first step towards this was the capital increase placed on March 31, 2020 after the end of the reporting period, with which the Company was able to achieve a net proceeds of EUR 3.6 million. This facts indicate the existence of a material uncertainty which may raise doubts as to the Group's ability to continue as a going concern and poses a risk to the Group's continued existence as a going concern pursuant to Art. 322 Sec. 2 sentence 3 HGB. We have not modified our audit opinion with regard to these facts.

Key audit matters in the audit of the consolidated financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from January 1, 2019 to December 31, 2019. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our audit opinion thereon, we do not provide a separate audit opinion on these matters.

From our perspective, the following matters were of most significance during our audit:

Revenue recognition

Stock options

We have structured our presentation of these key audit matters as follows:

1. Facts and problems
2. Audit approach and findings
3. Reference to further information

In the following, we will present these key audit matters:

Revenue recognition:

1. During the financial year, the Company recognized sales revenues in the amount of ca. EUR 1.1 million. Sales revenues are one of the most significant financial performance indicators in the capital market communication. These sales revenues include sales of the only main product in the amount of EUR 1.0 million and license revenues in the amount of EUR 0.1 million. Product sales are mainly realized by means of sales to few major customers. Partially there are framework agreements with customers which may be supplemented by further agreements. These agreements may be decisive as to whether a sale has been realized. An incomplete presentation of these additional agreements within the scope of revenue recognition poses a risk, which is why we believe this matter is of particular importance.

2. We have convinced ourselves from the correct recognition of sales by means of framework agreements, external confirmations as to possibly existing additional arrangements, proofs of delivery as well as the outgoing invoices and the related incoming payments. We could convince ourselves that any conditions additionally agreed upon with the major customers have been appropriately processed during the revenue recognition's assessment.

3. The Company's statements on the revenue recognition are contained in the consolidated financial statements' notes' section "notes to the consolidated statements of comprehensive income (consolidated statement of profit or loss and other comprehensive income) - 1 revenue".

Stock options:

1. As of the balance sheet date, stock option programs (AOP - "Equity settled share based payments"] have been recognized in the Company's consolidated financial statements. During the reporting year, further commitments for AOPs have been granted to employees and board members. The AOPs are presented in the consolidated financial statements under the relevant expense positions (cost of sales, research and development costs as well as distribution and administration costs) as well as equity. An amount of EUR 0.9 million of AOPs has been recognized as costs through profit and loss. The Company uses an external expert for the valuation of AOPs. From our perspective, share-based remuneration programs were of particular importance as they depend to a major extent on the legal representatives' assessments and estimates and are thus afflicted by uncertainties.

2. Based upon the knowledge that estimated values provide for an increased risk of misstatements in the financial reporting and that the legal representatives' assessment decisions have a direct and clear impact on the consolidated financial statements, we have convinced ourselves of the valuation parameters' (such as risk-free interest and the shares' volatility) appropriateness by means of contract and company data and by involving a specialist's expertise and have assessed the new commitments' valuations' appropriateness. Based on that, we audited the accounting effect in the consolidated statement of comprehensive income (consolidated income statement and other results) and in the consolidated balance sheet. The management board's underlying estimates and assessments made are within a reasonable range.

3. The Company's information on the stock option program's valuation is contained in the notes to the consolidated financial statements in section "Share-based payment expenses", "Description of stock-option programs", "Stock option programs - outstanding rights" and "Stock option programs - valuation parameters".

Other information

The executive directors are responsible for the other information. The other information comprises dated as of the date of our audit opinions:

- Compliance statement in the section "Corporate governance" of the 2019 Group management report,
- declaration on corporate governance in the section "Corporate governance" of the

2019 Group management report,

- section "Epi proColon" in the 2019 annual report,
- section "Foreword by the Executive Board" in the 2019 annual report,
- section "Our stock" in the 2019 annual report and
- section "Responsibility statement by the legal representatives" in the 2019 annual report.

The Supervisory Board is responsible for the following other information:

- section "Report of the Supervisory Board" in the 2019 annual report.

Our audit opinions on the consolidated financial statements and on the Group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the Group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the Executive Directors and the Supervisory Board for the consolidated financial statements and the Group management report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Article 315e paragraph 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the Group

management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems] as they have considered necessary to enable the preparation of a Group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the Group management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the Group management report.

Auditor's responsibilities for the audit of the consolidated financial statements and of the Group management report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the Group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the Group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Article 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this Group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the Group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit

evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the Group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the Group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Article 315e paragraph 1 HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the Group management report. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the Group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the

executive directors in the Group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We

- do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

OTHER LEGALAND REGULATORY REQUIREMENTS

Further information pursuant to Article 10 of the EU Audit Regulation

We were elected as Group auditor by the annual general meeting on May 15, 2019. We were engaged by the Supervisory Board on October 18, 2019. We have been the Group auditor of the Epigenomics AG without interruption since the financial year 2015.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is Andreas Weissinger.

Munich, dated April 1, 2020

Baker Tilly GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft
(Düsseldorf)

Hund	Weissinger
German CPA	German CPA

Audited Consolidated Financial Statements of Epigenomics AG Prepared in Accordance with IFRS as of and for the financial year ended December 31, 2018

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME) FOR THE PERIOD FROM JANUARY 1 TO DECEMBER 31

EUR thousand	Note	2017	2018
Revenue	1	1,864	1,533
Cost of sales	3	-246	-440
Gross profit		1,618	1,093
Gross margin (in %)		*86.8*	*71.3*
Other income	2	1,054	1,441
Research and development costs	3	-4,329	-6,418
Selling, general and administrative costs	3	-8,035	-8,703
Other expenses	3, 6	-597	-308
Operating result/earnings before interest and taxes (EBIT)	7	-10,289	-12,895
Interest income	8	18	17
Interest expenses	8	-175	-550
Other financial result	8	-3	-2
Net loss for the year before taxes on income		-10,449	-13,430
Taxes on income	9	214	738
Net loss for the year		-10,235	-12,692
Items that may be reclassified to profit or loss:			
Exchange rate differences from the conversion of foreign entities	23	322	-321
Fair value adjustment of financial instruments measured at fair value through other comprehensive income	23	152	-252
Other comprehensive income for the year		474	-573
Total comprehensive income for the year		-9,761	-13,265
Earnings per share (basic and diluted, in EUR)	10	-0.44	-0.47

CONSOLIDATED BALANCE SHEET AS OF DECEMBER 31

ASSETS EUR thousand	Note	Dec 31, 2017	Dec 31, 2018
Non-current assets			
Intangible assets	11	668	474
Property, plant and equipment	12	720	701
Deferred taxes	14	1,526	2,378
Total non-current assets		2,914	3,553
Current assets			
Inventories	15	293	364
Trade receivables	16	937	164
Marketable securities	17	905	653
Cash and cash equivalents	18	12,826	16,487
Other current assets	19	1,898	606
Total current assets		16,859	18,274
Total assets		19,773	21,827

EQUITY AND LIABILITIES EUR thousand	Note	Dec 31, 2017	Dec 31, 2018
Equity			
Subscribed capital	20	24,014	36,022
Capital reserve	21	59,509	68,802
Retained earnings	22	-62,880	-73,115
Net loss for the year		-10,235	-12,692
Other comprehensive income	23	169	-404
Total equity		10,577	18,613
Non-current liabilities			
Provisions	25	43	47
Total non-current liabilities		43	47
Current liabilities			
Trade payables	26	952	1,411
Deferred income		0	23
Convertible notes issued	27	6,536	0
Other liabilities	28	562	771
Provisions	25	1,103	962
Total current liabilities		9,153	3,167
Total equity and liabilities		19,773	21,827

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE PERIOD FROM JANUARY 1 TO DECEMBER 31

EUR thousand	Note	2017	2018
Cash and cash equivalents at the beginning of the year		11,531	12,826
Operating activities			
Net loss for the year		-10,235	-12,692
Adjustments for:			
Stock option expenses	4	455	1,151
Amortization of intangible assets	5, 11	191	196
Depreciation of property, plant and equipment	5, 12	152	112
Losses from the disposal of non-current assets	6	2	0
Foreign currency exchange results		0	-4
Financial income	8	-18	-18
Financial expenses	8	177	552
Taxes	9	-214	-738
Operating result before changes in operating assets and liabilities		-9,490	-11,441
Changes in operating assets and liabilities:			
Inventories	15	-37	-66
Trade receivables	16	1,262	782
Other assets	19	-1,491	1,297
Non-current and current provisions	25	-698	-147
Trade payables and other liabilities	26, 28	891	-776
Deferred income		-6	23
Tax paid		-7	-23
Cash flow from operating activities	30	-9,576	-10,351

EUR thousand	Note	2017	2018
Investing activities			
Payments to acquire intangible assets		-37	-15
Payments to acquire property, plant and equipment		-183	-91
Payments related to capitalized development costs		-363	0
Proceeds from investment grants received	12	17	813
Interest received	8	18	17
Cash flow from investing activities	31	-548	724
Financing activities			
Proceeds from the issue of new shares	20, 21	5,475	21,253
Payments for the issue of new shares	21	-374	-1,958
Proceeds from the conversion of convertible notes	27	6,461	0
Payments for the issue of convertible notes	27	-63	-1
Payments for the redemption of convertible notes		0	-6,020
Cash flow from financing activities	32	11,499	13,274
Net cash flow		1,375	3,647
Currency translation effects		-80	14
Cash and cash equivalents at the end of the year		12,826	16,487

As of the balance sheet date, EUR 24 thousand of cash and cash equivalents included restricted cash.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY AS OF DECEMBER 31

EUR thousand	Note	Subscribed capital	Capital reserve	Retained earnings	Net loss for the year	Other comprehensive income	Group equity
Dec 31, 2016		22,735	54,873	-51,719	-11,161	-305	14,424
Total comprehensive income 2017	23	0	0	0	-10,235	474	-9,761
Transfer of net loss for the year 2016 to retained earnings		0	0	-11,161	11,161	0	0
Capital increase without subscription rights	20	1,279	0	0	0	0	1,279
Premium from the capital increase without subscription rights	20, 21	0	4,195	0	0	0	4,195
Costs for the creation of new shares	21	0	-52	0	0	0	-52
Stock option expenses	4, 21	0	455	0	0	0	455
Option premium on convertible notes	27	0	38	0	0	0	38
Dec 31, 2017		24,014	59,509	-62,880	-10,235	169	10,577
Dec 31, 2017							
Total comprehensive income 2018	23	0	0	0	-12,692	-573	-13,265
Transfer of net loss for the year 2017 to retained earnings		0	0	-10,235	10,235	0	0
Capital increase with subscription rights	20	11,427	0	0	0	0	11,427
Premium from the capital increase with subscription rights	20, 21	0	9,827	0	0	0	9,827
Capital increase through contribution in kind	27	581	0	0	0	0	581
Premium from the capital increase through contribution in kind	27	0	485	0	0	0	485
Costs for the creation of new shares	21	0	-2,170	0	0	0	-2,170
Stock option expenses	4, 21	0	1,151	0	0	0	1,151
Dec 31, 2018		36,022	68,802	-73,115	-12,692	-404	18,613

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2018

BASIC INFORMATION, PRINCIPLES AND METHODS

DESCRIPTION OF BUSINESS ACTIVITY

Epigenomics ("Epigenomics", "the Group" or the "Company") was founded as a limited liability company under German law (Gesellschaft mit beschränkter Haftung – GmbH) in 1998 and has its registered office in Berlin, Germany. In 2000, the Company was converted into a stock corporation under German law (Aktiengesellschaft – AG) and entered into the commercial register (Handelsregister) of Charlottenburg under HRB 75861. It has been listed in the Prime Standard segment of the Frankfurt Stock Exchange since July 19, 2004 (ticker symbol: ECX).

In accordance with its Articles of Association, the object of the Company is the development and market---ing of procedures and devices for the production in quantity of particular epigenetic parameters such as DNA methylation patterns as well as the information technology bases necessary for their procurement and evaluation. Epigenomics AG is a molecular diagnostics company developing and commercializing a pipeline of proprietary products for screening, early detection and diagnosis of cancer. The Company's products enable doctors to diagnose cancer earlier and more accurately, leading to improved outcomes for patients.

GENERAL PRINCIPLES

The consolidated financial statements of Epigenomics AG have been prepared in accordance with section 315e of the German Commercial Code (Handelsgesetzbuch – HGB) and in application of the International Financial Reporting Standards (IFRSs) of the International Accounting Standards Board (IASB), London, in effect as of the December 31, 2018 balance sheet date, as adopted by the European Union (EU).

The Company has incurred accounting losses of EUR 73,115 thousand since being founded. The Company generated a net loss of EUR 12,692 thousand for 2018 (2017: EUR 10,235 thousand). The "going concern" principle in accordance with IAS 1.25 P*resentation of Financial Statements* was applied. With EUR 17.1 million in liquid assets (cash, cash equivalents and marketable securities) at year-end 2018, at the projected cash consumption the Company's current financial resources are sufficient to support its operations beyond 2018.

The Consolidated Statement of Comprehensive Income (Consolidated Statement of Profit or Loss and Other Comprehensive Income) has been prepared using the cost of sales method.

REPORTING PERIOD, REPORTING CURRENCY, AND ROUNDING

The reporting period (comparative period) as defined in these consolidated financial statements is the period from January 1 to December 31, 2018 (2017). The reporting currency is the euro (EUR). Many figures are rounded to the nearest thousand euros, which may give rise to rounding differences in the figures presented in these notes.

SCOPE OF CONSOLIDATION

The consolidated Group consists of Epigenomics AG as the parent company (registered office: Geneststrasse 5, 10829 Berlin, Germany) and Epigenomics, Inc., as its sole subsidiary during the reporting period. The subsidiary is registered in the U.S. state of Washington and since the reporting year has based its operations out of San Diego (11055 Flintkote Ave, Suite A, San Diego, CA 92121). Epigenomics AG held 100% of the share capital and the voting rights of Epigenomics, Inc. between January 1, 2017 and December 31, 2018.

For the reporting year and the previous year, the two companies each prepared separate financial statements which were either audited or reviewed, independent of their inclusion in the consolidated financial statements.

PRINCIPLES OF CONSOLIDATION

In acquisition accounting, the carrying amount of the investment is offset against the share of equity of the subsidiary attributable to the parent as at the date of acquisition. Any resulting difference is added to the assets and liabilities in the amount in which their market value deviates from their carrying amount at the time of the initial consolidation. Any amount in excess is recognized as goodwill.

All intercompany transactions and interim results, income and expenses, profits and losses, receivables and payables are eliminated in full on consolidation.

APPLICATION OF NEW AND REVISED IFRSs AND INTERPRETATIONS AND EFFECTS ON THE COMPANY'S CONSOLIDATED FINANCIAL STATEMENTS FOR FISCAL YEAR 2018

In the reporting year, the Group for the first time applied the following new and amended IFRSs and Interpretations issued by the IASB and endorsed by the EU that are effective for accounting periods beginning on or after January 1, 2018. Generally, the new standards and amendments mentioned below require prospective application.

IFRS 9 Financial Instruments (as revised in 2014) (endorsed by the EU on November 22, 2016)

IFRS 9 (as revised in 2014) replaced IAS 39 *Financial Instruments:* R*ecognition and Measurement* in its entirety upon its effective date. Compared to IFRS 9 (as revised in 2013), the 2014 version includes limited amendments to the classification and measurement requirements by introducing a "fair value through other comprehensive income" measurement category for certain simple debt instruments. It also adds the impairment requirements relating to the accounting for an entity's expected credit losses on its financial assets and commitments to extend credit.

IFRS 9 contains three basic categories for classifying financial assets: measured at amortized cost, measured at fair value with changes in other comprehensive income

(FVOCI) and measured at fair value with changes in profit or loss (FVTPL). Financial assets are classified in accordance with IFRS 9 on the basis of the Company's business model for managing financial assets and the characteristics of contractual cash flows. The previous categorization of financial assets according to IAS 39 (held to maturity, loans and receivables and available-for-sale) is omitted. Securities held by the Company, which were previously classified as available for sale in accordance with IAS 39, are held in a separate portfolio to generate interest income, but could be sold to meet liquidity requirements arising in the ordinary course of business. The Company believes that these securities are held within the framework of a business model whose objective is achieved both through the collection of contractual cash flows and through the sale of securities. The contractual terms of these financial assets result in cash flows that represent only principal and interest payments on the outstanding principal. These assets are therefore now classified as FVOCI in accordance with IFRS 9. This new classification had no effect on the valuation of the securities. Trade receivables which have been previously classified under IAS 39 as loans and receivables are now classified as measured at amortized cost.

The Company does not engage in hedge accounting. In addition, an analysis of past developments in receivables has shown that the Company was not exposed to any notable defaults. Application of the new IFRS 9 therefore did not give rise to any material effects on the Company's financial statements for fiscal year 2018. This is particularly true of the "impairment approach" prescribed in the standard, which did not have any effect with regard to our current customer base. In addition, the new requirements for classifying financial assets depending on our business model and on classifying financial liabilities did not give rise to any changes in measurement and recognition. The Company continues to measure all financial assets previously held at fair value in accordance with IAS 39 at fair value. It made use of the exemption not to adjust comparative information for previous periods with regard to changes in classification and measurement (including impairment). To this extent, the disclosures and information on financial instruments for the previous year (2017) generally do not meet the requirements of IFRS 9, but those of IAS 39.

IFRS 15 Revenue from Contracts with Customers including the Modifications to IFRS 15 – Effective Date of IFRS 15 and the Clarifications to IFRS 15 – Revenue from Contracts with Customers (endorsed by the EU on September 22, 2016)

The new IFRS 15 establishes a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. As of its effective date, it replaced the following revenue standards and interpretations relating to revenue recognition: IAS 18 *Revenue*, IAS 11 *Construction Contracts*, IFRIC 13 *Customer Loyalty Programmes*, IFRIC 15 *Agreements for the Construction of Real Estate*, IFRIC 18 *Transfers of Assets from Customers*, and SIC-31 *Revenue – Barter Transactions Involving Advertising Services*. IFRS 15 provides a single, principles based five-step model for recognizing revenue from contracts with customers.

When transitioning to IFRS 15, the Group applied the modified retrospective method (without simplification rules), according to which the cumulative adjustment amounts were recognized as of January 1, 2018. Accordingly, the comparative information for 2017 was not adjusted, i.e. it was presented as before in accordance with IAS 18, IAS 11 and the corresponding interpretations. In addition, the disclosure requirements under IFRS 15 were generally not applied to the prior-year information. The first-time application of the new IFRS 15 did not have any material impact on the Company's financial statements for fiscal year 2018, as its business model is currently based on standardized product sales and income generated on the basis of existing licensing agreements which are not significantly affected by the new requirements. Nevertheless, the execution of new licensing agreements could impact the Company's annual financial statements going forward. Licensing agreements in the life sciences sector normally stipulate that payments to the licensor resulting from these agreements are partly due in the form of upfront fees or milestone payments. In contrast to the previous accounting policy, the application of IFRS 15 may change the time over which or the point in time at which revenue is recognized. The Company used the new five-step model to analyze its existing arrangements with its licencees and determined that IFRS 15 is not expected to have any effect on the Company's accounting.

Amendments to IFRS 2 Classification and Measurement of Share-based Payment Transactions (endorsed by the EU on February 26, 2018)

The Amendments to IFRS 2 clarify issues concerning the treatment and/or distinction between cash--settled and equity-settled share-based payments.

The first-time application of the Amendments to IFRS 2 did not have any significant effect on the Company's financial statements for fiscal year 2018, nor is the application of the Amendments to IFRS 2 expected to have any material effect on the Company's financial statements for fiscal years from 2019 onward.

Amendments to IFRS 4 applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts (endorsed by the EU on November 3, 2017)

The Amendments to IFRS 4 clarified the scope of the standard and the applicable conditions for a temporary exemption from IFRS 9 for insurers, as well as for a temporary exemption from specific requirements under IAS 28.

The first-time application of the Amendments to IFRS 4 did not have any effect on the Company's financial statements for fiscal year 2018, nor is the application of the Amendments to IFRS 4 expected to have any effect on the Company's financial statements for fiscal years from 2019 onward.

Amendments to IAS 40 Transfers of Investment Property (endorsed by the EU on March 14, 2018)

The Amendments to IAS 40 clarify that a change in use of investment property occurs when the property meets, or ceases to meet, the definition of investment property and there is evidence of the change in use. In isolation, a change in management's intentions for the use of a property does not provide evidence of a change in use.

The first-time application of the Amendments to IAS 40 did not have any effect on the Company's financial statements for fiscal year 2018, nor is the application of the Amendments to IAS 40 expected to have any effect on the Company's financial statements for fiscal years from 2019 onward.

Annual Improvements to IFRS Standards (2014–2016 Cycle) – Amendments to IFRS 1 and IAS 28 (endorsed by the EU on February 7, 2018)

The Annual Improvements (2014–2016 Cycle) include amendments to IFRS 1 *First-time Adoption of International Financial Reporting Standards*, and to IAS 28 *Investments in Associates and Joint Ventures*. The amendments to IFRS 1 relate to the removal of short-term exemptions for first-time adopters. The amendments to IAS 28 clarify the measurement of an associate or a joint venture at fair value.

The first-time application of the Annual Improvements to IFRS Standards (2014–2016 Cycle) did not have any effect on the Company's financial statements for fiscal year 2018 nor is the application of the Annual Improvements to IFRS Standards (2014–2016 Cycle) expected to have any effect on the Company's financial statements

for fiscal years from 2019 onward.

IFRIC 22 Foreign Currency Transactions and Advance Consideration (endorsed by the EU on March 28, 2018)

The new IFRIC 22 addresses the issue of how to determine the date of the transaction for the purpose of determining which exchange rate to use when recognizing revenue in circumstances where an entity has received advance consideration in a foreign currency.

The first-time application of the new IFRIC 22 did not have any significant effect on the Company's financial statements for fiscal year 2018, nor is the application of the new IFRIC 22 expected to have any material effect on the Company's financial statements for fiscal years from 2019 onward.

New and Revised IFRSs and Interpretations that do not yet Require Mandatory Application (but Allow Early Application) for the Reporting Year

The Company intends to adopt all new and/or revised standards, amendments and interpretations as soon as their adoption is mandatory and they are endorsed by the EU. The Company had not yet applied the following new and revised IFRSs and Interpretations which had been issued but were not yet effect-ive in the reporting period, some of which had not yet been endorsed by the EU:

Mandatory application for fiscal years beginning on or after January 1, 2019:

IFRS 16 Leases (endorsed by the EU on October 31, 2017

The new IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessees and lessors. Upon its effective date it will supersede IAS 17 *Leases*, IFRIC 4 *Determining Whether an Arrangement Contains a Lease*, SIC-15 *Operating Leases – Incentives* and SIC-27 *Evaluating the Substance of Transactions in the Legal Form of a Lease*. IFRS 16 introduces significant changes to lessee accounting. It removes the distinction between operating and fin-ance leases under IAS 17 and instead requires a lessee to recognize a right-of-use asset and a lease liability at lease commencement for all leases, except for short-term leases and leases of low value assets. A lessee can apply IFRS 16 either by means of a full retrospective approach or a modified retrospective approach. If the latter approach is selected, an entity is not required to restate the comparative information and the cumulative effect of initially applying IFRS 16 must be presented as an adjustment to opening retained earnings (or other component of equity as appropriate).

The application of IFRS 16 will impact the Company's financial statements from fiscal year 2019 onward. When first applying the modified retrospective model, the Company opted for the transitional relief for short-term leases and low-value assets. As a result of this new standard on leases, the Company's rental agreement for office space at its Berlin headquarters must then be recognized as a liability in the balance sheet instead of being treated as an off-balance sheet liability. Based on the current contractual situation and parameters, the rental agreement will correspondingly be recognized as a non-current asset amounting to approximately EUR 650 thousand as of January 1, 2019. This value takes into account the contractually agreed extension option for the Company during the term of the contract. From fiscal year 2019, this will increase total assets and cause a decrease in the equity ratio. Amortization and impairment, as well as the interest expense on the affected leases will in future be recognized in other comprehensive income as opposed to the current method of recognizing the lease expense, which will result in a slight improvement in EBIT, EBITDA, and EBITDA before share-based payment expenses. Currently, the annual amortization and impairment charges are expected to amount to EUR 92 thousand from January 1, 2019 onward, with the interest expense estimated at EUR 40 thousand (2019). Currently, the Company has no other lease agreements in place that would be affected by IFRS 16.

IFRIC 23 Uncertainty over Income Tax Treatments (endorsed by the EU on October 23, 2018)

The new IFRIC 23 clarifies the accounting for uncertainties in income taxes. The interpretation is to be applied to the determination of taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates, when there is uncertainty over income tax treatments under IAS 12. IFRIC 23 was endorsed by the EU on October 23, 2018.

The Company is currently examining the effects of applying IFRIC 23 on the consolidated financial statements from fiscal year 2019 onwards. The Company assumes that any effects will for the time being only be reflected in the notes.

Amendments to IFRS 9 Prepayment Features with Negative Compensation (endorsed by the EU on March 22, 2018)

The Amendments to IFRS 9 contain on the one hand changes regarding symmetric prepayment options. These amend the existing requirements in IFRS 9 regarding termination rights in order to allow measurement at amortized cost (or, depending on the business model, at fair value through other comprehensive income) even in the case of negative compensation payments. On the other hand, the amendments clarify that the carrying amount of a financial liability is immediately recognized in profit or loss following modification or exchange. A retrospective change of the accounting treatment may therefore become necessary if in the past the effective interest rate was adjusted and not the amortized cost amount. The Amendments to IFRS 9 were endorsed by the EU on March 22, 2018.

The Company does not expect that the application of the Amendments to IFRS 9 will have any effect on its financial statements for fiscal years from 2019 onward.

Amendments to IAS 19 Plan Amendment, Curtailment or Settlement (not yet endorsed by the EU)

In the event a defined benefit plan is amended, curtailed or settled, the Amendments to IAS 19 require an entity to determine the current service cost and net interest for the remained to the fiscal year using the same updated actuarial assumptions used to remeasure the net defined benefit liability. In addition, the amendments clarify the effect of a plan amendment, curtailment or settlement on the requirements regarding the asset ceiling.

The Company does not expect that the application of the Amendments to IAS 19 will have any effect on its financial statements for fiscal years from 2019 onward.

Amendments to IAS 28 Long-term Interests in Associates and Joint Ventures (endorsed by the EU on February 8, 2019)

The Amendments to IAS 28 clarify that an entity applies IFRS 9, including its impairment requirements, to long-term interests in an associate or joint venture that form part of the net investment in the associate or joint venture but to which the equity method is not applied. In addition, paragraph 41 was deleted.

The Company does not expect that the application of the Amendments to IAS 28 will have any effect on its financial statements for fiscal years from 2019 onward.

Annual Improvements to IFRS Standards (2015–2017 Cycle) (not yet endorsed by the EU)

The Annual Improvements to IFRS Standards (2015–2017 Cycle) include amendments to IFRS 3 *Business Combinations*, IFRS 11 *Joint Arrangements*, IAS 12 *Income Taxes*, and IAS 23 *Borrowing Costs*. The Amendments to IFRS 3 clarify that an entity must remeasure its previously held interest in a joint operation when it obtains

control of the business. The Amendments to IFRS 11 clarify that an entity does not remeasure its previously held interest in a joint operation when it obtains joint control of the business. The Amendments to IAS 12 clarify that all income tax consequences of dividend payments must be accounted for in the same way. The Amendments to IAS 23 clarify that if any borrowing used to develop an asset remains outstanding after the related qualifying asset is ready for its intended use or sale, that borrowing becomes part of the funds that an entity borrows generally when calculating the cap-italization rate on general borrowings.

The Company does not expect that the application of the Annual Improvements to IFRS Standards (2015–2017 Cycle) will have any effect on its financial statements for fiscal years from 2019 onward.

Mandatory application for fiscal years beginning on or after January 1, 2020:

Amendments to IFRS 3 Definition of a Business (not yet endorsed by the EU)

The Amendments to IFRS 3 are intended to resolve the problems that arise when an entity determines whether it has acquired a business or a group of assets. Such problems may arise due to the fact that the accounting requirements for goodwill, acquisition costs and deferred taxes differ on the acquisition of a business and on the acquisition of a group of assets.

The Company does not expect that the application of the Amendments to IFRS 3 will have any effect on its financial statements for fiscal years from 2020 onward.

Amendments to IAS 1 and IAS 8 Definition of Material (not yet endorsed by the EU)

The Amendments to IAS 1 and IAS 8 clarify the definition of "material" and align the definition used in the Conceptual Framework and the standards themselves.

The Company does not expect that the application of the Amendments to IAS 1 and IAS 8 will have any effect on its financial statements for fiscal years from 2020 onward.

Revisions to Conceptual Framework for Financial Reporting in accordance with IFRSs (not yet endorsed by the EU)

The new Conceptual Framework includes revised definitions of an asset and a liability as well as new guidance on measurement and derecognition, presentation and disclosure. These revisions result in amendments to multiple standards and interpretations that refer to the Conceptual Framework.

The Company does not expect that the Revisions to Conceptual Framework for Financial Reporting in accordance with IFRSs will have any effect on its financial statements for fiscal years from 2020 onward.

Mandatory application for fiscal years beginning on or after January 1, 2022:

IFRS 17 Insurance Contracts (not yet endorsed by the EU)

The new IFRS 17 establishes the principles for the recognition, measurement, presentation and disclos-ure of insurance contracts within the scope of the standard. The objective of IFRS 17 is to ensure that a reporting entity provides relevant information and faithfully represents those contracts.

The Company does not expect that the application of the Amendments to IFRS 17 will have any effect on its financial statements for fiscal years from 2020 onward.

MANAGEMENT'S JUDGMENT, ASSUMPTIONS AND EXPECTATIONS

The management of the Company has made several judgments in the process of applying the entity's accounting policies that have a significant effect on the amounts recognized in the financial statements. Those judgments concern the capitalization of development costs and the recognition of deferred taxes. The judgments are described for each relevant position in the enumeration of accounting and valuation principles.

Management's expectations on the future are usually based on the current economic outlook according to the consensus prognoses by leading economic and financial research institutions and independent analysts. The global economic situation is not expected to change significantly in 2019, but rather to rest on shaky ground due to the increasing political challenges around the world.

The plans of the Group's management do not expect Epigenomics to be highly dependent on the overall economic situation in the short term. The Group's operating activities are furthermore not highly dependent on the availability of or the price development for commodities or industrial supplies but rather on the individual situation of the Company and its opportunities to continue its operations by further financing transactions. Therefore, the Company is still dependent on the condition and the development of the capital markets (mainly in the U.S.A. and in Germany), particularly with regard to the life sciences industry. Additionally, the Company is strongly dependent on inclusion in the guidelines issued by medical professional societies and the reimbursement decisions by the payors in the healthcare system of the U.S.A. with regard to its lead product – Epi proColon, and subsequently on the commercial success of this product. The Company's strategy going forward assumes positive reimbursement decisions in 2019 and the years to come. The Company also assumes that the results of the trials in the U.S.A. for its new product, the HCC BloodTest, will be positive.

The Company continues to expect that the economic and fiscal policies in Germany and the U.S.A. will largely remain the same in 2019. This also applies to regulatory requirements in the countries that the Company primarily exports to, as no significant changes are anticipated in this regard in the coming year.

All future scenarios furthermore assume essentially unrestricted access to the relevant clinical and biological samples, corresponding clinical data and sufficient resources for the execution of the Company's commercial projects.

In the short to medium term, the Company expects the EUR/USD exchange rate to hover around the rate at the end of 2018, even in the case of greater volatility. The Trump administration's policies have not always followed experts' expectations in terms of their impact on exchange rates and will most likely remain difficult to forecast. The increasing political turmoil on the world stage will time and again lead to more pronounced fluctuations in either direction. Management's plans for 2018 are based on an average exchange rate of EUR/USD 1.14. It also took note of the predictions of financial experts and banks as of the date on which the budget was drawn up.

The preparation of the consolidated financial statements in accordance with IFRSs requires, in the case of several items, that assumptions or estimates be made that affect the carrying amounts in the consolidated balance sheet and/or the amounts recognized in the consolidated statement of comprehensive income (consolidated

statement of profit or loss and comprehensive income). This also applies to the presentation of contingent assets and liabilities. The actual amounts may vary from these assumptions and estimates.

Determining the useful life of capitalized development costs of the Company's products requires a long-term estimation of the market approval timelines for the products, their market acceptance and/or the speed of their market penetration, regulatory developments in key markets, the timing and the extent of reimbursement decisions, and competition just to name some of the most important para-meters. Particularly for novel products like blood-based cancer tests there are no empirical values and less experience available, which makes any estimations difficult. The Group's management closely observes developments on the key markets and regularly reviews its own projections. Reaching or not reaching a milestone – like a market approval decision – will therefore lead to remeasurements which may possibly be decisive for a change of the previously assumed useful lives.

In particular, further assumptions and estimates are required for:

- determining the useful lives of other property, plant and equipment and non-current intangible assets,
- determining whether the criteria for the capitalization of development costs and the recoverability of internally generated intangible assets are met,
- testing assets for impairment (particularly regarding intangible assets),
- the assessment of the possible use of contractual extension options,
- determining the terms of in-licensed intellectual property rights,
- determining if deferred taxes are realizable,
- determining if financial instruments classify as "measured at amortized cost", "measured at fair value with changes in other comprehensive income (FVOCI)" or "measured at fair value with changes in profit or loss (FVTPL)",
- determining the fair value of financial instruments,
- setting the parameters regarding the measurement of share-based payment instruments, and
- accounting for provisions (particularly the determination of the likelihood of occurrence).

ACCOUNTING AND VALUATION PRINCIPLES

Fair value measurement

These consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at revalued amounts or their fair values at the end of each reporting period.

For determining and disclosing the fair value of financial instruments, the Company uses the following hierarchy in accordance with IFRS 13 *Fair Value Measurement*:

Level 1: Quoted (unadjusted) prices in active markets for identical assets or liabilities

Level 2: Inputs other than quoted prices included within level 1 that are observable for assets or liabilities, either directly (as prices) or indirectly (derived from prices)

Level 3: Inputs for assets or liabilities that are not based on observable market data (unobservable inputs)

The carrying amounts of financial assets and liabilities such as cash and cash equivalents, marketable securities, trade receivables, trade payables, convertible notes and other current liabilities approximate their fair values due to their short-term maturities. The fair value of marketable securities is based on quoted market prices (level 1). There were no transfers between level 1 and level 2 fair value measurements, and no transfers into or out of level 3 fair value measurements during the reporting period.

Revenue recognition

Revenue from contracts with customers is recognized for the sale of goods and property rights (e.g., patents) or the rendering of other services when the customer obtains the control of the distinct goods or service and the customer has the ability to direct the use of and obtain the benefits from the goods or services received. The revenue recognized is the amount of the consideration that the entity would expect to be entitled to in exchange for these goods or services. If a contract includes a series of distinct goods or services, the transaction price is allocated to each performance obligation on the basis of the respective stand-alone selling price. If a stand-alone selling price is not directly observable, the entity reasonably estimates the stand-alone selling price. Revenue is recognized for each performance obligation either at a specific point in time or over a specific period of time.

Non-refundable received upfront payments for the future delivery of goods and rendering of services, respectively, are deferred and recognized when the goods are delivered and the services are rendered, respectively. Optional prolongation terms are considered individually in accordance with the underlying exercise conditions and anticipated likelihood of their exercise.

Licensing revenue is generated by granting third parties exclusive and non-exclusive usage rights to technologies and biomarkers patented by the Company or licensed in by the Company itself. For each grant of rights of use, it must be determined whether the transfer of control to the customer takes place at a specific point in time or in a specific period of time. Licensing revenue is then recognized on an accrual basis in accordance with the terms of the underlying contract. Period-related licensing revenue is recognized on a straight-line basis over the term of the contract. Royalty income agreed on the basis of product sales and/or other measures is recognized on the basis of the underlying contract if these measures are known reliably.

If sales are accompanied by rights of return, the full amount of revenue is not recognized until the right of return has expired. Up to this point in time, revenue is only reported in the amount of production costs less any return costs. There were no sales with return rights in the reporting year.

Cost of sales

Cost of sales includes expenses for material used in products sold, changes in inventories, services received in connection with product sales or other types of revenue, royalties to be paid to third parties and triggered by product sales or other types of revenue. In addition, cost of sales includes directly allocable portions of personnel expenses, costs of intellectual property, depreciation, amortization and impairment, as well as pro rata overheads.

Other income

Other income includes third-party research grants, currency exchange rate gains, earnings from the reversal of provisions, income from the sale of assets outside of the Company's ordinary business activities, reimbursements from suppliers and insurance companies, and other non-operating earnings.

Government grants

In individual cases, cost contributions from public authorities are granted for research projects. These grants are partially paid in advance and then reported as deferred income (see below). To some extent, grants will only be paid after the work has been performed and proven. A current asset is recorded in such cases.

Subsidies received for product development activities are deducted from capitalized development costs, and investment grants and subsidies are offset directly against the acquisition costs of the subsidized assets, i.e. in both cases the carrying amount of the asset is reduced. The grant is thus recognized as a reduced depreciation expense over the remaining useful life.

Government grants usually come with certain requirements, which have been met so far by the Company and are expected to be met going forward. Should the requirements cease to be met in the future, redemption obligations could arise which have not been recognized yet.

Research and development costs

Research and development costs (R&D costs) include the personnel expenses for the R&D staff, costs of R&D material, depreciation, amortization and impairment, service fees, licensing fees and other direct expenses in connection with the Company's research and/or development activities (including clinical studies) which cannot be classified as revenue-generating activities. In addition, R&D costs include pro rata overhead costs charged to the R&D departments.

Selling, general and administrative costs

Selling, general and administrative costs (SG&A costs) include:

- all direct personnel and material expenses of the corresponding departments,
- depreciation and amortization expenses of the corresponding departments,
- other direct expenses of the corresponding departments, and
- pro rata overheads of the corresponding departments as well as the Company's statutory costs.

Other expenses

Other expenses consist of all operating expenses which do not classify as cost of sales, R&D costs or SG&A costs as defined above. This includes in particular but not exclusively

- foreign exchange rate losses,
- losses from the disposal of assets outside of the ordinary business activities, and
- expenses due to extraordinary effects or measures such as restructuring expenses or write-downs of non-current assets (e.g., goodwill impairment).

Share-based payment expenses

The fair value of granted stock options is determined in accordance with IFRS 2 *Share-based Payment* by simulation of the future movement in the Company's share capital on the basis of market parameters (e.g., volatility and risk free rate) and normal distributed random numbers ("Monte Carlo simulation"). The fair value of the stock options is expensed over the expected option term of up to four years against the capital reserve. The measurement is based on the fair value as of the grant date.

The fair value of phantom stock rights granted in previous years is calculated using the binomial model based on the Cox-Ross-Rubinstein model in accordance with IFRS 2 *Share-based Payment*, and recognized *pro rata temporis* as expenses and as a provision due to the obligation of the Company for a cash settlement in the future. If phantom stock rights are held by current employees of the Group, the related expenses are recorded as personnel costs and included in the payroll provisions. If phantom stock rights are held by former employees of the Group, the related expenses are recorded as other costs and included in other provisions.

Intangible assets

Intangible assets other than goodwill and capitalized development costs are measured at cost less straight-line amortization. Depending on the investment, the useful life of between three years (software) and twenty years (patents) will be defined. For patents, the useful life in individual cases depends on the term of the patent protection. Amortization of intangible assets is allocated in the consolidated statement of comprehensive income (consolidated statement of profit or loss and comprehensive income) to the functional area in which they are used. IAS 38 *Intangible Assets* is applied. In accordance with this standard, an intangible asset is reported if it is likely that a future economic benefit is associated with the use of such asset and that its cost can be reliably determined.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment annually. In addition, assets or groups of assets are tested for impairment if there are any indications at the measurement date that they may be impaired. If the carrying amount of an intangible asset exceeds the recoverable amount of this asset as of the balance sheet date, this will be taken into account by means of a write-down, the amount of which is determined by the result of the impairment test. If there is no longer any indication of impairment, the impairment loss is reversed up to a maximum of the asset's amortized cost.

Capitalized development costs

Expenditure on research activities is recognized as an expense in the period in which it is incurred. An internally generated intangible asset arising from internal development is recognized if, and only if, all of the following requirements in accordance with IAS 38.57 *Intangible Assets* have been fulfilled:

- proof of the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- proof of the intention to complete the intangible asset to use or sell it;
- proof of the ability to use or sell the intangible asset;
- proof of how the intangible asset will generate probable future economic benefits;
- proof of the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset;
- demonstration of the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for the capitalization of development costs is the sum of expenditure incurred from the date when the intangible assets first met the aforementioned recognition criteria. Where no internally generated intangible asset can be recognized, development expenditure is charged to profit or loss in the period in which it is incurred. Subsequent to initial recognition, capitalized development costs are reported at cost less accumulated amortization and impairment losses, on the same basis as intangible assets acquired separately. The useful life of such capitalized development costs is assumed under consideration of the business plan and amounts to up to ten years for the currently capitalized assets. Amortization is recorded on a straight-line basis.

Property, plant and equipment

Property, plant and equipment is measured at cost less depreciation. Apart from directly attributable costs, pro rata overhead costs and depreciation are also included in the cost of internally produced items of property, plant and equipment. The cost is reduced by public and governmental investment grants. Repair costs are immediately recorded as an expense. Leasehold improvements are depreciated on a straight-line basis over the remaining term of the underlying leases (including optional extension periods). Movable items of property, plant and equipment are depreciated on a straight-line basis. The useful life is three to ten years for technical and electronic equipment and five to ten years for operating and office equipment.

Once disposed of, the asset and its accumulated depreciation are reported as a disposal. Income or expenses resulting from the disposal of assets (proceeds less residual carrying amount) is reported in the consolidated statement of comprehensive income (consolidated statement of profit or loss and comprehensive income) under other income/other expenses.

If, based on external or internal sources of information, there are indications that the carrying amount at the balance sheet date of an item of property, plant or equipment measured as described above exceeds its recoverable amount upon disposal, the asset is tested for impairment and, if necessary, written down. The amount of the impairment is determined by the fair value of the asset less transaction cost or – if higher – the net present value of future cash flows estimated from the value in use of the asset. An impairment test will be carried out annually for assets or groups of assets for which an impairment is assumed. If there is no longer any indication of impairment, the impairment loss is reversed up to a maximum of the asset's amortized cost.

Deferred taxes

Deferred taxes are calculated in accordance with IAS 12 *Income Taxes*. They are recognized on the basis of temporary differences between the carrying amount of assets and liabilities in the financial statements in accordance with IFRS of the companies involved and in their tax accounts. Furthermore, deferred tax assets are recognized for unutilized tax loss carryforwards and unutilized tax credits to the extent that deferred tax liabilities exist, or that taxable income is likely to be available against which to utilize the benefits of the temporary differences and that these are expected to reverse in the foreseeable future. At each balance sheet date, it is determined whether or not these requirements are still met. If such a realization in the foreseeable future is not likely, a valuation allowance is recognized against the tax loss carryforwards.

Deferred tax assets and tax liabilities from temporary differences associated with investments in subsidiaries are not recognized when the timing of the reversal of the temporary difference can be controlled, and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets and liabilities are measured using the local tax rates applicable on the balance sheet date or the local tax rates which are expected to apply at the future point in time when the asset is realized or the liability settled. Tax rates are used that have been enacted or substantively enacted by the end of the reporting period. Deferred tax assets and liabilities are only offset if they relate to taxes levied by the same tax authority and if the Group intends to settle its current tax assets and liabilities on a net basis.

Inventories

Inventories consist of finished and unfinished products, raw materials, low-value consumables as well as other production supplies. They are measured at the lower of cost and net realizable value. The manufacturing costs of the finished and semi-finished products include directly attributable unit costs, depreciation, amortization of capitalized development costs and overheads attributable to the production process. For finished and semi-finished products the principle of item-by-item measurement applies.

Financial instruments

A financial instrument is a contract that gives rise to a financial asset for one contracting party and a financial liability or equity instrument for another contracting party.

Trade receivables without a significant financing component are initially recognized at their transaction price. All other financial assets and financial liabilities are initially recognized at fair value.

On initial recognition, a financial asset is classified into one of the following measurement categories:

- at amortized cost
- FVOCI debt instruments (investments in debt instruments measured at fair value with changes in other comprehensive income),
- FVOCI equity investments (equity investments measured at fair value with changes in other comprehensive income),
- FVTPL (at fair value with changes in profit or loss).

For an asset that is not measured at FVTPL, transaction costs directly attributable to its acquisition or issue are added to the measurement at initial recognition.

Financial assets are not reclassified after initial recognition unless the Company changes its business model for managing financial assets.

A financial asset is measured at amortized cost if it has not been designated as an FVTPL and both of the following conditions are met:

- It is held within the framework of a business model whose objective is to hold financial assets in order to collect the contractual cash flows, and
- the contractual terms of the financial asset give rise to cash flows at specified dates that represent only principal and interest payments on the outstanding principal.

A debt instrument is designated as an FVOCI if it has not been designated as an FVTPL and both of the following conditions are met:

- It is held under a business model whose objective is both to hold financial assets to collect contractual cash flows and to sell financial assets, and
- its terms and conditions result in cash flows at specified dates which represent only principal and interest payments on the outstanding principal.

On initial recognition of an equity investment that is not held for trading, there is an irrevocable option to show consequential changes in the fair value of the investment in other comprehensive income. This choice is made by the Company on a case-by-case basis for each investment.

All financial assets that are not measured at amortized cost or at FVOCI are measured at FVTPL. This includes all derivative financial assets. On initial recognition, the Company may irrevocably designate as FVTPL financial assets that otherwise qualify for measurement at amortized cost or at FVOCI if this results in the elimination or significant reduction of accounting mismatches.

The Company makes an assessment of the objectives of the business model in which the financial asset is held at a portfolio level as this best reflects the way the business is managed and information is provided to management. The information to be considered includes:

- the stated policies and objectives for the portfolio and the implementation of these policies in practice,
- how the results of the portfolio are evaluated and reported to management,
- the risks affecting the results of the business model (and the financial assets held under that business model) and how those risks are managed,
- frequency, extent and timing of sales of financial assets in prior periods and expectations about future sales activities.

Financial assets that are held or managed for trading and whose performance is measured at fair value are measured at FVTPL.

For the purpose of assessing whether contractual cash flows are solely principal and interest payments, the “principal amount” is defined as the fair value of the financial asset at initial recognition. “Interest” is defined as the consideration for the time value of money and for the risk of default associated with the principal outstanding over a specified period, as well as for other basic credit risks, costs (such as liquidity risk and administrative costs) and a profit margin. In assessing whether the contractual cash flows are exclusively interest and principal payments on the principal amount, the Company considers the contractual terms of the instrument. This includes an assessment of whether the financial asset contains a contractual arrangement that could change the timing or amount of the contractual cash flows so that they no longer meet these conditions. In making this assessment, the Company takes into account the following factors:

- certain events that would change the amount or timing of cash flows,
- conditions that would adjust the interest rate, including variable interest rates,
- early repayment and extension options, and
- conditions that restrict the Company’s right to receive cash flows from a particular asset.

An early redemption option is consistent with the criterion of exclusive interest and principal payments if the amount of the early redemption substantially comprises unpaid interest and principal payments on the outstanding principal, which may include appropriate additional consideration for the early termination of the contract.

Financial liabilities are measured at amortized cost or at fair value through profit or loss (FVTPL). A financial liability is classified as an FVTPL if it is classified as held for trading, is a derivative or is designated as such upon initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains or losses, including interest expense, are recognized in profit or loss. Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expenses and foreign currency translation differences are recognized in profit or loss. Gains or losses on derecognition are also recognized in profit or loss.

The Company derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire or it transfers the rights to receive the cash flows in a transaction in which all significant risks and rewards of ownership of the financial asset are transferred. Derecognition also occurs when the Company neither transfers nor retains substantially all the risks and rewards of ownership and does not retain control of the transferred asset. The Company carries out transactions in which it transfers recognized assets but retains all or substantially all of the risks and rewards of ownership of the transferred asset. In such cases, the transferred assets are not derecognized. Trade receivables are generally written off if they are overdue by more than one year and are not subject to enforcement.

The Company derecognizes a financial liability when the contractual obligations are discharged, cancelled or expired or when the terms of the contract are modified and the cash flows of the adjusted liability are significantly different. In this case, a new financial liability is recognized at fair value based on the revised terms. When a financial liability is derecognized, the difference between the carrying amount of the liability extinguished and the consideration paid (including non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

The Company invoices its customers in accordance with individual contractual agreements or the applicable general terms and conditions. Invoices are generally payable net within 30 days. New customers are generally supplied against prepayment. In the case of receivables from the granting of licenses, the payment terms are determined on the basis of the agreements from the underlying license agreements. The resulting payments are either due immediately or within a period of up to 90 days.

Cash equivalents

A cash equivalent is defined as a financial instrument which is readily convertible on a short-term basis to a known amount of cash and which is subject to an insignificant risk of changes in value (IAS 7.6 *Statement of Cash Flows*). Financial instruments generally qualify as cash equivalents when they are more closely related

to the money markets than to the bond markets and have a remaining term of less than three months. They are measured at amortized cost.

Prepaid expenses

Payments before the balance sheet date in respect of expenses for a specific period after that date are deferred and reported at amortized cost as prepaid expenses in other current assets.

Deferred income

Deferred income is recognized for grants and for research and development payments ("R&D payments") received in advance. Grants received in advance for research expenses which were provided by governmental or comparable national, regional or local authorities are recognized through profit or loss as other income over the subsidized terms of each grant project according to its stage of completion. Subsidies received in advance for product development activities are deducted from capitalized development costs. Payments received in advance from customers for R&D services to be rendered by the Company in the future or for licenses are deferred and recognized through profit or loss under the terms and conditions of the contract according to the stage of project completion (percentage of completion method).

Provisions

In accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, a provision is recognized if a present obligation exists as a result of a past event, if it is probable that an outflow of resources embodying economic benefits will be required to settle this obligation and if a reliable estimate can be made of the amount of the obligation. The amount recognized as a provision is the best estimate of the expenditure required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows expected to be required to settle the present obligation, its carrying amount is the present value of these cash flows. Obligations arising from share-based payment programs that provide for awards payable in cash (i.e., the Company's phantom stock programs) are measured at fair value and recognized as current or non-current provisions based on the remaining term of the underlying rights until these can be exercised.

ALTERNATIVE PERFORMANCE MEASURES

Earnings before interest and taxes (EBIT) are defined as the overall result of the year/period before the other result of the year/period, income taxes, other financial result, interest expenses and interest income. EBIT before depreciation and amortization (EBITDA) is defined as EBIT before depreciation and amortization. Share-based payment is defined as the cost from total fair value changes of all stock options and phantom stock rights granted during the year/period. EBITDA before stock-based compensation is defined as EBITDA before stock-based compensation expense.

EBIT, EBITDA and EBITDA before stock-based compensation are all non-IFRS measures used and defined by Epigenomics that are commonly used in global capital market communications and are requested by analysts and investors.

CURRENCY TRANSLATION

In the separate financial statements, receivables and liabilities in foreign currencies are measured using the corresponding euro reference rate published by the European Central Bank and applicable as of the balance sheet date.

The U.S. dollar is the functional and reporting currency of our U.S. subsidiary.

For consolidation purposes, the expenses and income of the subsidiary are translated into euros at the average monthly exchange rates. Assets and liabilities of the subsidiary are translated at the end of each reporting period using the closing rate of the euro as the Group currency. Equity components that are measured in terms of historical cost in U.S. dollars are translated using the exchange rate at the date of the transaction. The resulting translation differences are accounted for separately within equity.

Foreign currency exchange rates applied in the reporting period:

Closing rates	Dec 31, 2017	Dec 31, 2018
EUR/USD	1.1993	1.1450

Average rates	2017	2018
EUR/USD	1.1370	1.1793

NOTES TO THE CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME)

1 REVENUE

Revenue by type:

	2017		2018	
	EUR thousand	in %	EUR thousand	in %
Product sales (own and third-party)	548	29.4	808	52.7
Licensing income	1,271	68.2	636	41.5
R&D income and reimbursements	45	2.4	46	3.0
Other	0	0	43	2.8
Total revenue	1,864	100.0	1,533	100.0

Licensing income is generated by out-licensing of own intellectual property (e.g. technologies, biomarkers) to third parties. Revenue from product sales is generated by the sale of the Group's products through own sales channels, through distribution partners or by the rendering of services by third parties based on the Company's products. R&D income and reimbursements are generated by rendering services in connection with contract research and by charging pass-through costs to third parties.

Revenue by geographical market:

	2017		2018	
	EUR thousand	in %	EUR thousand	in %
Europe	280	15.0	296	19.3
North America	943	50.6	637	41.6
Asia	638	34.2	598	39.0
Rest of the world	3	0.2	2	0.1
Total revenue	1,864	100.0	1,533	100.0

In the reporting year, 81% of total revenue (2017: 81%) was generated by the Company's three largest customers.

2 OTHER INCOME

EUR thousand	2017	2018
Foreign exchange rate gains	2	704
Income from the reversal of provisions	581	564
Recoveries and refunds	59	64
Reversal of write-downs on receivables	209	0
Income from the disposal of other assets	161	1
Correction of deferred liabilities	42	23
Third-party research grants from public authorities	0	58
Other	0	27
Total other income	1,054	1,441

Income from the reversals of provisions includes an effect of EUR 554 thousand (2017: EUR 290 thousand) from fair value changes of the issued phantom stock rights.

3 COST ALLOCATION BY FUNCTION

2017 EUR thousand	Cost of sales	R&D costs	SG&A costs	Other expenses	Total
Materials and consumables	197	591	17	0	805
Depreciation and amortization	9	253	81	0	343
Personnel costs	4	2,247	3,285	0	5,536
Other costs	36	1,238	4,652	597	6,523
Total	246	4,329	8,035	597	13,207

2018 EUR thousand	Cost of sales	R&D costs	SG&A costs	Other expenses	Total
Materials and consumables	422	383	40	0	845
Depreciation and amortization	0	221	87	0	308
Personnel costs	5	2,901	4,440	0	7,346
Other costs	13	2,913	4,136	308	7,370
Total	440	6,418	8,703	308	15,869

4 PERSONNEL COSTS

EUR thousand	2017	2018
Wages and salaries	4,304	5,495
Share-based payment expenses	577	1,151
– *thereof: expenses for issuing stock options (SO)*	*162*	*371*
SO expenses for Greg Hamilton (CEO)	*99*	*211*
SO expenses for Jorge Garces (CEO since December 1, 2017)	*11*	*58*
SO expenses for Albert Weber (EVP Finance since January 1, 2018)	*n/a*	*102*
SO expenses for Dr. Uwe Staub (COO until March 31, 2018)	*52*	*0*
Social security expenses	655	700
– *thereof:*		
employer's contribution to a national pension fund (Germany)	*160*	*134*
employer's contribution to a 401(k) savings plan (U.S.A.)	*51*	*68*
Total personnel costs	5,536	7,346

The Group employed an average of 43 employees in 2018 (2017: 44). The 44 employees as of the end of 2018 included 21 employees across the areas of research, product development, IP, regulatory affairs, quality assurance and manufacturing. Their activities are reported as R&D costs in the financial statements. The remaining 23 employees reported as selling, general and administrative functions work in business and commercial development, customer and technical service, accounting, finance, legal, human resources, IT, investor relations and general management.

The share-based payment expenses for PSR in the amount of EUR 0 thousand (2017: EUR 122 thousand) resulted from cash payments for exercises of PSR and revaluations of issued PSR which had not been exercised yet, and included a fluctuation of the fair value of the rights in the amount of EUR 2 thousand (2017: EUR 109 thousand). Measurement of the stock options granted gave rise to share-based payment expenses amounting to EUR 1,151 thousand (2016: EUR 455 thousand).

5 DEPRECIATION AND AMORTIZATION

EUR thousand	2017	2018
Amortization of intangible assets	191	196
– *thereof: amortization of capitalized development costs*	*111*	*119*
Depreciation of property, plant and equipment	152	112
Total depreciation and amortization	343	308

6 OTHER EXPENSES

EUR thousand	2017	2018
Foreign exchange rate losses	595	305
Losses from the disposal of assets	1	2
Other	1	1
Total other expenses	597	308

7 OPERATING RESULT (EBIT) AND EBITDA

EUR thousand	2017	2018
Operating result/earnings before interest and taxes (EBIT)	-10,289	-12,895
Total depreciation and amortization	343	308
EBIT before depreciation and amortization (EBITDA)	-9,946	-12,587
Share-based payment expenses	577	1,151
EBITDA before share-based payment expenses	-9,369	-11,436

8 FINANCIAL RESULT

Net gains and losses on all financial instruments:

EUR thousand	2017	2018
Interest from available-for-sale financial assets	18	17
Interest and related income	18	17
Total financial income	18	17
Other interest expenses	-175	-550
Interest and related expenses	-175	-550
Other finance costs	-3	-2
Total financial expenses	-178	-552

Total financial result	-160	-535

9 TAXES ON INCOME

The reported taxes on income in the amount of EUR -738 thousand (2017: EUR -214 thousand) consist solely of taxes relating to the Company's U.S. subsidiary.

EUR thousand	2017	2018
Current tax expenses	8	23
Deferred tax income due to loss carryforwards	-222	-761
Total taxes on income	-214	-738

For the calculation of deferred taxes of the U.S. subsidiary, a local tax rate of 21% was applied from January 1, 2018 onwards.

Calculation of the applicable tax rate in Germany for the purpose of deferred taxes:

in %	2017	2018
Corporate income tax	15.0	15.0
Solidarity surcharge	5.5	5.5
Trade tax	14.35	14.35
underlying trade tax rate of assessment	*410*	*410*
Total applicable tax rate in Germany for the purpose of deferred taxes	30.2	30.2

Tax reconciliation:

EUR thousand	2017	2018
Net loss for the year before taxes on income	-10,449	-13,430
Expected tax income	3,156	4,056
applicable tax rate for the Group	*30.2%*	*30.2%*
permanent differences	*-41*	*-40*
other foreign taxes	*-7*	*-23*
effect of foreign taxes	*-313*	*-348*
unrecognized tax loss carryforwards	*-2,580*	*-2,867*
Effective tax income	214	738
Effective tax rate	2.1%	5.8%

The expected tax expense for the reporting year has been calculated by applying the individual tax rates for the Group companies to the net results before taxes on income. Permanent differences result from non-deductible expenses in accordance with German tax law.

10 EARNINGS PER SHARE

Earnings per share (basic) are calculated by dividing the net loss for the year by the weighted average number of shares issued. The outstanding stock options and convertible notes granted by the Company are antidilutive in accordance with IAS 33.41 and 33.43 *Earnings per Share*. Therefore, the earnings per share (diluted) equal the earnings per share (basic). The number of shares issued as of the balance sheet date amounted to 36,021,540 (December 31, 2017: 24,014,360).

	2017	2018
Net loss for the year (in EUR thousand)	-10,235	-12,692
Weighted average number of shares issued	23,161,627	27,016,155
Earnings per share (basic and diluted, in EUR)	-0.44	-0.47

NON-CURRENT ASSETS

11 INTANGIBLE ASSETS

EUR thousand		Software	Licenses/ patents	Development costs	Total intangible assets
Jan 1, 2017	Cost	758	1,151	3,586	5,495
	Additions	37	0	67	104
	Disposals	-384	-113	0	-497
	Currency translation	-1	0	0	-1
Dec 31, 2017	Cost	410	1,038	3,653	5,101
	Additions	16	0	0	16
	Disposals	0	0	-14	-14
	Currency translation	0	0	0	0
Dec 31, 2018	Cost	426	1,038	3,639	5,103
Jan 1, 2017	Accumulated amortization	594	1,068	3,078	4,740
	Additions	40	40	111	191
	Disposals	-384	-113	0	-497
	Currency translation	-1	0	0	-1
Dec 31, 2017	Accumulated amortization	249	995	3,189	4,433
	Additions	45	31	119	195
	Disposals	0	0	0	0
	Currency translation	0	0	0	0
Dec 31, 2018	Accumulated amortization	294	1,026	3,308	4,628
Dec 31, 2017	Carrying amounts	161	43	464	668
Dec 31, 2018	Carrying amounts	132	12	331	475

The capitalized development costs for Epi proColon and Epi proLung are assumed to have a useful life of ten years. The annual amortization for these assets amounted to EUR 111 thousand (Epi proColon) and EUR 8 thousand (Epi proLung).

12 PROPERTY, PLANT AND EQUIPMENT

EUR thousand		Fixtures/ leasehold improvements	Technical equipment	Other property, plant and equipment	Total property, plant and equipment
Jan 1, 2017	Cost	571	1,419	91	2,081
	Additions	0	165	3	168
	Disposals	0	-337	-4	-341
	Currency translation	-5	23	-5	13
Dec 31, 2017	Cost	566	1,270	85	1,921
	Additions	3	91	0	94
	Disposals	0	-82	0	-82
	Currency translation	0	2	1	3
Dec 31, 2018	Cost	569	1,281	86	1,936
Jan 1, 2017	Accumulated depreciation	144	1,188	36	1,368
	Additions	44	99	9	152
	Disposals	0	-336	-4	-340
	Currency translation	-5	28	-2	21
Dec 31, 2017	Accumulated depreciation	183	979	39	1,201
	Additions	44	61	8	113
	Disposals	0	-79	0	-79
	Currency translation	0	1	0	1
Dec 31, 2018	Accumulated depreciation	227	962	47	1,236
Dec 31, 2017	Carrying amounts	383	291	46	720
Dec 31, 2018	Carrying amounts	342	319	39	700

Subsidies received in previous years reduced the cost of individual items of property, plant and equipment. These subsidies constitute public financial assistance for businesses under the joint program for the improvement of regional economic structures (Gemeinschaftsaufgabe “Verbesserung der regio-nalen Wirtschaftsstruktur”) granted from German federal and state funds. The funding period ended on April 8, 2017. However, if certain conditions attaching to the funding are not complied with going forward, the funding sponsors may demand partial or full repayment of the subsidies in the following years. These conditions include preserving the current permanent jobs at the Company’s Berlin site and the obligation to keep the subsidized assets for a period of at least five years after the end of the project at the subsidized location. The Company assumes that it will be able to fulfill all of the conditions.

13 ASSETS SCHEDULE

EUR thousand		Intangible assets	Property, plant and equipment	Total intangible assets and property, plant and equipment
Jan 1, 2017	Cost	5,495	2,081	7,576
	Additions	104	168	272
	Disposals	-497	-341	-838
	Currency translation	-1	13	12
Dec 31, 2017	Cost	5,101	1,921	7,022
	Additions	16	94	110
	Disposals	-14	-82	-96
	Currency translation	0	3	3
Dec 31, 2018	Cost	5,103	1,936	7,039
Jan 1, 2017	Accumulated amortization and depreciation	4,740	1,368	6,108
	Additions	191	152	343
	Disposals	-497	-340	-837
	Currency translation	-1	21	20
Dec 31, 2017	Accumulated amortization and depreciation	4,433	1,201	5,634
	Additions	195	113	308
	Disposals	0	-79	-79
	Currency translation	0	1	1
Dec 31, 2018	Accumulated amortization and depreciation	4,628	1,236	5,864
31.12.2017	Carrying amounts	668	720	1,388
Dec 31, 2018	Carrying amounts	475	700	1,175

14 DEFERRED TAXES

For the Group, deferred taxes arise as described in the following table:

	Deferred tax assets from temporary differences		Deferred tax liabilities from temporary differences	
EUR thousand	Dec 31, 2017	Dec 31, 2018	Dec 31, 2017	Dec 31, 2018
Intangible assets and property, plant and equipment	34	20	140	100
Current assets	0	0	1	0
Current liabilities	0	0	88	117
Total	34	20	229	217
Total after offsetting	0	0	195	197

EUR thousand	Dec 31, 2017	Dec 31, 2018
Deferred tax assets due to German tax loss carryforwards	57,404	60,516
Deferred tax assets due to U.S. tax credits	2,562	2,698
Deferred tax assets due to U.S. tax loss carryforwards	1,781	2,378
Total deferred tax assets due to tax loss carryforwards	61,747	66,033
Deferred tax position (net) from temporary differences	-195	-197
Total deferred tax assets	61,552	65,836
Allowance on deferred tax assets	-60,026	-63,418
Recognized deferred tax assets	1,526	2,378

Overview of tax loss carryforwards (2018 estimated):

EUR thousand	2017	2018
Tax loss carryforwards in Germany (corporate income tax)	*190,907*	*201,287*
Tax loss carryforwards in Germany (trade tax)	*189,360*	*199,740*
Tax loss carryforwards in the U.S.A. (corporate income tax)	*7,072*	*11,324*
R&D tax credits in the U.S.A.	*2,562*	*3,139*

Since all deferred tax assets and liabilities arising from temporary differences must be settled with the same tax authority that levied the taxes to which those deferred tax assets and liabilities relate, in accordance with IAS 12.71 et seq. *Income Taxes*, only those deferred tax assets and liabilities which relate to taxes levied by the same tax authority have been offset.

Since its founding through to December 31, 2017, the Company's tax loss carryforwards in Germany amounted to EUR 191 million for corporate income tax and to EUR 189 million for trade tax. Furthermore, the Company estimates that the accumulated tax loss carryforwards in both aforementioned tax categories will increase by more than EUR 10 million when it files its tax returns for 2018. In accordance with German tax law, such tax losses have an unlimited carryforward period. As a consequence of completed tax audits, tax loss carryforwards in the amount of EUR 167 million are undisputed. The resulting deferred tax asset is therefore sufficient to offset the aforementioned deferred tax liability from temporary differences of EUR 197 thousand as of December 31, 2018. However, a future utilization of these carryforwards could become impossible under certain conditions (e.g., a major change of ownership and a change of business) based on the applicable German tax law. Due to the current financial situation of the Company, without sufficient liquidity to achieve the break-even point, valuation allowances have been recognized for the calculated exceeding amount of deferred tax assets at the balance sheet date.

The temporary differences connected with shares in subsidiaries, for which no deferred tax assets had been recognized in the reporting periods presented, amounted to a total of EUR 9,082 thousand (2017: EUR 5,655 thousand).

In the reporting year, deferred tax assets were recognized due to tax loss carryforwards of Epigenomics, Inc. and temporary differences between IFRSs and U.S. tax law. These tax loss carryforwards in the U.S.A. arising before December 31, 2018 can be utilized for up to twenty years. A utilization of the remaining tax loss carryforwards of Epigenomics, Inc. in the amount of EUR 11 million over the next three years is very likely according to the Company's business plan, which is based on favorable reimbursement decisions in the U.S.A. for Epi proColon over the course of 2019.

The deferred tax asset in the U.S.A. was remeasured as of the end of the previous year in light of the tax reform legislation passed by the U.S. Senate at the end of December 2017. The key point of this reform was to cut the tax rate for businesses from 34% to 21% from January 2018 onwards. Going forward, there will be no time limit on utilizing tax loss carryforwards arising from January 1, 2018 onwards.

The R&D tax credits in the U.S.A. expire on various dates beginning in 2022 through to 2037.

Changes in recognized deferred tax assets in the reporting year:

EUR thousand	2017	2018
January 1	1,551	1,526
Deferred tax income	1,146	761
Adjustment due to changes in tax rates	-937	0
Foreign currency adjustments	-234	91
December 31	1,526	2,378

CURRENT ASSETS

15 INVENTORIES

EUR thousand	Dec 31, 2017	Dec 31, 2018
Consumables, raw materials, supplies	71	123
Semi-finished goods	148	84
Finished goods	74	157
Total inventories	293	364

The cost of inventories recognized as R&D costs through profit or loss in 2018 amounted to EUR 96 thousand (2017: EUR 63 thousand) and was attributable to write-offs of finished goods due to the determination of an unlikelihood that these goods could have been sold before the end of their shelf lives or because their shelf lives had already expired.

16 TRADE RECEIVABLES

Trade receivables primarily include receivables from development partners, customers and licensees. These receivables do not bear interest and are therefore not exposed to any interest rate risk. The carrying amounts of the receivables correspond to their fair values. The maximum default risk corresponded to the carrying amount as of the balance sheet date.

EUR thousand	Dec 31, 2017	Dec 31, 2018
Trade receivables	937	164
thereof not yet due	862	122
thereof past due (up to 90 days)	41	9
thereof not yet invoiced (current assets from contractual relationships)	34	33

No allowances for doubtful accounts had been recognized as of the balance sheet date.

17 MARKETABLE SECURITIES

The marketable securities in the amount of EUR 653 thousand as of December 31, 2018 (December 31, 2017: EUR 905 thousand) are so-called "Trust-preferred Securities" issued by a wholly owned subsidiary of Deutsche Bank AG. They are redeemable at any time in one payment at the issuer's discretion. In previous years they have been recognized as "available-for-sale" financial instruments in accordance with IAS 39.9 *Financial Instruments: Recognition and Measurement*. Since the reporting year, they have been classified in accordance with IFRS 9. They are now measured at fair value with changes in value in other comprehensive income as the Company has no intention of trading with them.

The reported securities are denominated in euros and are subject to the usual market and interest risks. The interest rate risks are price risks and interest rate cash flow risks. The fair value of the marketable securities is identified by their stock exchange quotations at each relevant balance sheet date. The securities were traded on active markets in the reporting year.

18 CASH AND CASH EQUIVALENTS

Cash and cash equivalents increased to EUR 16,487 thousand as of the balance sheet date (December 31, 2017: EUR 12,826 thousand). 99% of those funds was denominated in euros at the balance sheet date, with the remainder denominated in U.S. dollars. The total amount was deposited in current accounts at three different banks.

At the balance sheet date, an amount of EUR 24 thousand of bank deposits was restricted cash.

19 OTHER CURRENT ASSETS

EUR thousand	Dec 31, 2017	Dec 31, 2018
Prepaid expenses	709	338
Receivables from tax authorities	307	197
Interest receivables	9	9
Claims from grant projects	808	1
Other	65	61
Total other current assets	1,898	606

20 SHARE CATEGORIES AND CAPITAL STRUCTURE

As of December 31, 2018, the share capital of Epigenomics AG consisted exclusively of non-par value ordinary registered shares with equal rights.

Equity structure of the Company as of the balance sheet date:

EUR	Dec 31, 2017	Dec 31, 2018
Subscribed capital	24,014,360	36,021,540
Authorized Capital	10,088,530	0
Authorized Capital 2017/I	*994,426*	*0*
Authorized Capital 2017/II	*9,094,104*	*0*
Conditional Capital	11,367,630	12,007,180
Conditional Capital VII	*21,065*	*21,065*
Conditional Capital IX	*521,095*	*521,095*
Conditional Capital X	*8,825,470*	*9,465,020*
Conditional Capital XI	*1,000,000*	*1,000,000*
Conditional Capital XII	*1,000,000*	*1,000,000*

Subscribed capital increased by 12,007,180 shares or EUR 12,007,180 in October 2018 by way of a capital increase through issuing new shares.

Authorized Capital 2017/I and Authorized Capital 2017/II were fully revoked by means of the resolution of the General Shareholders' Meeting dated May 30, 2018, and replaced by Authorized Capital 2018/I and Authorized Capital 2018/II. As part of the capital increase carried out in October 2018, both tranches of authorized capital were fully utilized.

Conditional Capital VII can no longer be used to grant stock options as the respective deadlines have passed. The Stock Option Program 09–13, for which this conditional capital was earmarked, has now expired. There are no longer any exercisable rights outstanding. As a result, additional shares can no longer be created from Conditional Capital VII.

The share capital is conditionally increased by up to EUR 521,095.00 by means of issuing up to 521,095 new non-par value registered shares (Conditional Capital IX). The conditional capital increase serves to grant shares to the holders or creditors of bonds or participation rights issued by the Company or a subsidiary until May 29, 2022 on the basis of the authorization resolution of the General Shareholders' Meeting dated May 30, 2017 if option or conversion rights are exercised, if option or conversion ob-ligations are performed or if the Company exercises its optional right to deliver shares of the Company instead of payment of the cash amount due (or parts thereof). The new shares are issued at the respect-ive option or conversion price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is only to be implemented if bonds or participation rights are issued in accordance with the authorization resolution of the General Shareholders' Meeting dated May 30, 2017, and only to the extent that

- option or conversion rights are exercised or
- holders or creditors of bonds or participation rights who are under an obligation to exercise an option or under a conversion obligation perform their obligation to exercise the option or their conversion obligation or
- the Company exercises its optional right to deliver shares of the Company instead of paying the cash amount due (or parts thereof)

and to the extent that no cash settlement is granted and no shares from an authorized capital, treasury shares or shares of another listed company are delivered. The new shares issued carry dividend rights from the beginning of the fiscal year in which they are issued. The Executive Board is authorized, as far as legally permissible and with the consent of the Supervisory Board, to determine that, if no resolution on the appropriation of net profit for the fiscal year immediately

preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall carry dividend rights from the beginning of the fiscal year immediately preceding the year of issue.

The Executive Board is also authorized, with the consent of the Supervisory Board, to determine the further details concerning the implementation of the conditional capital increase.

The share capital is conditionally increased by up to EUR 9,465,020.00 by means of issuing up to 9,465,020 new non-par value registered shares (Conditional Capital X). The conditional capital increase serves to grant shares to the holders or creditors of bonds or participation rights, such shares being issued by the Company or a subsidiary until May 29, 2022 on the basis of the authorization reso-lution of the General Shareholders' Meeting dated May 30, 2017 or until May 29, 2023 on the basis of the Executive Board's authorization resolution of the General Shareholders' Meeting dated May 30, 2018 if option or conversion rights are exercised, if option or conversion obligations are performed or if the Company exercises its optional right to deliver shares of the Company instead of payment of the cash amount due (or parts thereof). The new shares are issued at the respective option or conversion price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is only to be implemented if bonds or participation rights are issued in accordance with the authorization resolution of the General Shareholders' Meeting dated May 30, 2017 or the resolution of the General Shareholders' Meeting dated May 30, 2018 granting authorization to the Executive Board, and only to the extent that

- option or conversion rights are exercised or
- holders or creditors of bonds or participation rights who are under an obligation to exercise an option or under a conversion obligation perform their obligation to exercise the option or their conversion obligation or
- the Company exercises its optional right to deliver shares of the Company instead of paying the cash amount due (or parts thereof)

and to the extent that no cash settlement is granted and no shares from an authorized capital, treasury shares or shares of another listed company are delivered. The new shares issued carry dividend rights from the beginning of the fiscal year in which they are issued. The Executive Board is authorized, as far as legally permissible and with the consent of the Supervisory Board, to determine that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall carry dividend rights from the beginning of the fiscal year immediately preceding the year of issue.

The Executive Board is also authorized, with the consent of the Supervisory Board, to determine the further details concerning the implementation of the conditional capital increase.

In the reporting year, no shares have been issued from Conditional Capital X.

The share capital is conditionally increased by up to EUR 1,000,000.00 by means of issuing up to 1,000,000 new non-par value registered shares (Conditional Capital XI). The conditional capital increase serves to grant or issue shares to members of the Executive Board of the Company, to members of the management of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG and to employees of the Company and of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG who exercise the subscription rights they were granted prior to the end of April 30, 2018 pursuant to the authorization resolution of the General Shareholders' Meeting dated May 25, 2016 (Stock Option Program 16–18). The new shares are issued against payment by the beneficiary to the Company of the respective exercise price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is to be implemented only if subscription rights are issued in accordance with the authorization resolution on the Company's Stock Option Program 16–18 by the General Shareholders' Meeting dated May 25, 2016 and only to the extent that the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares issued carry dividend rights from the beginning of the fiscal year in which they are created. The Executive Board may determine, as far as legally permissible and with the consent of the Supervisory Board, that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall be entitled to dividends from the beginning of the fiscal year immediately preceding the year of issue; if the new shares are issued to members of the Executive Board, the Supervisory Board is authorized to do so.

The Supervisory Board is also authorized to determine the further details concerning the implement-ation of the conditional capital increase where the granting of subscription rights to members of the Executive Board is concerned. In all other cases, the Executive Board is authorized to determine such details.

Between 2016 and 2018, the maximum permitted number of share options were issued based on Conditional Capital XI. In accordance with the terms and conditions of the stock option program, no new shares can be created upon exercise of these stock options before October 2020.

The share capital is conditionally increased by up to EUR 1,000,000.00 by means of issuing up to 1,000,000 new non-par value registered shares (Conditional Capital XII). The conditional capital increase serves to grant or issue shares to members of the Executive Board of the Company, to members of the management of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG and to employees of the Company and of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG who exercise the subscription rights they were granted prior to the end of April 30, 2019 pursuant to the authorization resolution of the General Shareholders' Meeting dated May 30, 2017 (Stock Option Program 17–19). The new shares are issued against payment by the beneficiary to the Company of the respective exercise price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is to be implemented only if subscription rights are issued in accordance with the authorization resolution on the Company's Stock Option Program 17–19 by the General Shareholders' Meeting dated May 30, 2017 and only to the extent that the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares issued carry dividend rights from the beginning of the fiscal year in which they are created. The Executive Board may determine, as far as legally permissible and with the consent of the Supervisory Board, that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall be entitled to dividends from the beginning of the fiscal year

immediately preceding the year of issue; if the new shares are issued to members of the Executive Board, the Supervisory Board is authorized to do so.

The Supervisory Board is also authorized to determine the further details concerning the implement-ation of the conditional capital increase where the granting of subscription rights to members of the Executive Board is concerned. In all other cases, the Executive Board is authorized to determine such details.

Based on Conditional Capital XII, 606,170 share options can still be issued by April 30, 2019. In accordance with the terms and conditions of the stock option program, no new shares can be created upon exercise of these stock options before April 2022.

21 CAPITAL RESERVE

The capital reserve comprises the premiums arising on the issuance of shares and the expenses relating to the issuance of shares, as well as expenses from the issue of stock options to Executive Board and staff members. The capital reserve increased from EUR 59,509 thousand as of December 31, 2017 to EUR 68,802 thousand as of December 31, 2018. A net increase of EUR 8,142 thousand was attributable to the capital increase in the September of the reporting year through issuing new shares from authorized capital. An increase of EUR 1,151 thousand was attributable to the issuance of stock options to Executive Board and staff members (2017: EUR 455 thousand).

22 RETAINED EARNINGS

Retained earnings decreased from EUR -62,880 thousand as of December 31, 2017, to EUR -73,115 thousand as of December 31, 2018 due to the transfer of the Company's net loss for 2017.

23 OTHER COMPREHENSIVE INCOME

The other comprehensive income includes unrealized gains and/or losses on marketable securities and exchange rate differences from the remeasurement of the results and the financial position of the Company's subsidiary whose financial statements were prepared in U.S. dollars. The actual disposal of remeasured financial assets and/or liabilities leads to a recognition of the cumulated revaluation differences through profit or loss.

EUR thousand	2017	2018
January 1	-305	169
Remeasurement of marketable securities	152	-252
Exchange rate differences	322	-321
December 31	169	-404

24 CAPITAL MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern while maximizing the long-term return to stakeholders. An optimization of the debt/equity ratio is always considered.

The current liabilities, cash and cash equivalents, marketable securities and equity attributable to equity holders, comprising subscribed capital, capital reserve (including offset retained earnings) and other comprehensive income are subject to the Group's capital management.

In the reporting year, the Group's equity ratio increased from 53.5% as of December 31, 2017 to 85.3% as of December 31, 2018, due primarily to the capital increase in 2018 and the redemption of convertible notes in December 2018.

The Company is not subject to any statutory capital requirements. However, the Company is obliged to issue new shares in connection with granted option rights from its existing stock option programs.

LIABILITIES

25 PROVISIONS

Statement of changes in provisions:

EUR thousand	Contract-related provisions	Payroll provisions	Provisions for claims from phantom stock rights	Other provisions	Total
Jan 1, 2017	323	431	1,122	65	1,941
thereof non-current	*0*	*0*	*50*	*39*	*89*
Utilizations	0	-415	-185	-12	-612
Reversals	-273	-12	-290	-6	-581
Additions	0	381	0	17	398
Dec 31, 2017	50	385	647	64	1,146
thereof non-current	*0*	*0*	*0*	*43*	*43*
Utilizations	0	-382	-73	-21	-476
Reversals	0	0	-554	0	-554
Additions	0	876	0	17	893
Dec 31, 2018	50	879	20	60	1,009
thereof non-current	*0*	*0*	*0*	*47*	*47*

Payroll provisions were recognized for obligations from bonus commitments to management and employees of the Company. These provisions may in individual cases also be utilized beyond a twelve-month time frame.

Provisions for claims from phantom stock rights (PSRs) were recognized based on the fair value of all issued and outstanding rights resulting from the Company's phantom stock programs (PSPs).

Other provisions were recognized for various operating obligations which were uncertain as of the reporting date with respect to their exact amounts and/or timing. A utilization of both of these categories of provisions is largely expected within the next twelve months.

26 TRADE PAYABLES

The reported trade payables in the amount of EUR 1,411 thousand as of the balance sheet date (December 31, 2017: EUR 952 thousand) are all non-interest-bearing and are generally due within 30 days. The total amount relates exclusively to non-derivative financial liabilities due in full within two months of the balance sheet date.

27 CONVERTIBLE NOTES ISSUED

In September 2017, the Company issued a convertible note with a principal amount of EUR 7.1 million to Cathay Fortune International Company Limited (CFIC) under exclusion of subscription rights. By issuing the convertible notes – as agreed in the Business Combination Agreement dated April 26, 2017 between Epigenomics and CFIC and published in the offer document for the voluntary public takeover offer of June 8, 2017 – the Company received an immediate liquidity inflow of approximately EUR 6.5 million.

The convertible notes matured on December 31, 2018 and could have been be converted by CFIC into up to 994,397 shares of the Company. CFIC did not exercise this conversion right. In connection with the Company's capital increase in October 2018, CFIC exercised 580,569 subscription rights to which it was entitled as a shareholder of Epigenomics AG. The subscription rights were exercised such that CFIC subscribed for the newly issued shares against an in-kind contribution. The contribution in kind consisted of the partial contribution of its redemption right from the notes to the Company and amounted to EUR 1,079,900.00. The Company's redemption obligation from the convertible notes was thus reduced by the same amount, to EUR 6,020,100.00. This obligation was satisfied in December 2018, i.e., it had completely expired by the balance sheet date.

EUR 550 thousand in interest expenses for convertible notes was recognized through profit or loss in the reporting year.

EUR thousand	
Gross proceeds of the issue of convertible notes 2017	6,461
thereof: Liability element of convertible notes at issue date	*6,423*
thereof: Equity element of convertible notes at issue date	*38*
Total expenses related to the issue of the convertible notes for the liability element	-62
Expenses related to the issue of the convertible notes for the equity element	-0
Total interest expense	674
Conversion of redemption rights into equity	-1,080
Effect of conversion on interest	14
Payment of principal through redemption	-6,020
Liability element of convertible notes at December 31, 2018	0

28 OTHER LIABILITIES

EUR thousand	Dec 31, 2017	Dec 31, 2018
Payables due to staff	345	512
Accrued audit fees	121	127
Payables due to tax authorities	91	100
Deferred income	0	27
Payables to social security institutions	1	0
Other	4	5
Total other liabilities	562	771

The reported other liabilities are all non-interest-bearing. Included are non-derivative financial liabilities in the amount of EUR 262 thousand that were exclusively due within two months of the balance sheet date.

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FINANCIAL INSTRUMENTS AND FINANCIAL LIABILITIES FROM FINANCING ACTIVITIES

Primary financial instruments			as of Dec 31, 2017		as of Dec 12, 2018	
EUR thousand	Measurement principle	Fair value hierarchy level	Carrying amount	Fair value	Carrying amount	Fair value
Assets						
Marketable securities	FVOCI	1	*905*	*905*	*653*	*653*
Cash and cash equivalents	n/a		12,826	12,826	16,487	16,487
Liabilities						
Convertible notes	AC	2	*7,100*	*6,536*	*0*	*0*

AC = measured at amortized cost
FVOCI = measured at fair value through other comprehensive income

Net liabilities from financing activities				Non-cash changes			
EUR thousand	Note	Jan 1, 2018	Cash flows	Offset against equity	Recognized in profit or loss	Other changes	Dec 31, 2018
Prepayments for financing projects	19	-346	-2	0	348	0	0
Trade payables	26	68	-68	171	0	0	171
Convertible notes	8, 27	6,536	-6,020	-1,080	550	14	0
Net liabilities from financing activities		6,258	-6,090	-909	898	14	171

NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

Cash consists of bank deposits and cash in hand. Cash equivalents are defined as instruments convertible to a known amount of cash on a short-term basis and carrying a very low risk of changes in value. As of the balance sheet date, the Company's cash and cash equivalents balance sheet item comprised exclusively cash. For the cash flow consolidation of the U.S. subsidiary, the operating assets and liabil-ities (excluding cash and cash equivalents) were translated at the average monthly exchange rates.

30 OPERATING ACTIVITIES

Cash flow from operating activities is derived indirectly on the basis of the net profit/loss for the year.

31 INVESTING ACTIVITIES

Cash flow from investing activities is calculated based on actual payments.

Proceeds from investment grants received of EUR 813 thousand (2017: EUR 17 thousand) were used for the development of fixed assets.

32 FINANCING ACTIVITIES

Cash flow from financing activities is calculated based on actual payments.

Gross proceeds from the issue of new shares in the amount of EUR 21,253 thousand in the reporting year (2017: EUR 5,475 thousand) related to the Company's capital increase from authorized capital in 2018. The Company generated a gross cash outflow of EUR 6,020 thousand from the redemption of convertible notes in the reporting year (2017: EUR 0). The cash outflow from financing activities amounted to EUR 1,959 thousand in 2018 (2017: EUR 437 thousand) and related to the above-mentioned capital increase.

33 CASH CONSUMPTION

Cash flow from operating activities and cash flow from investing activities less transactions in securities is monitored by the Company as "cash consumption".

EUR thousand	2017	2018
Cash flow from operating activities	-9,576	-10,351
Cash flow from investing activities	-548	724
Net proceeds from transactions in securities	0	0
Cash consumption	-10,124	-9,627

RISKS AND RISK MANAGEMENT

34 GENERAL

For a comprehensive overview of the risks the Company is facing, please refer to the "Report on opportunities and risks" section of the Group management report 2018.

35 LIQUIDITY RISK

The liquidity risk to which Epigenomics is exposed results from the Group's potential inability to meet its financial liabilities, i.e., not being able to pay its suppliers, creditors or lenders. It is therefore the task of cash and liquidity management to ensure the individual Group companies' liquidity at any time. The expected cash inflows and outflows are constantly monitored to ensure short-term liquidity. These activities are supported by internal cash forecasts and a corresponding strategy of managing time deposits with the Company's principal banks.

Furthermore, Epigenomics constantly monitors the capital markets and – if required – makes all necessary efforts to raise fresh capital in order to avoid illiquidity.

Epigenomics has strict cost management in place to avoid unnecessary spending. On the procurement side, the Company always tries to reduce purchase prices by closing favorable contracts and negotiating all relevant conditions and takes advantage of granted terms of payment.

36 FOREIGN CURRENCY EXCHANGE RISK

The Group executes transactions denominated in foreign currencies and is therefore exposed to the risk of exchange rate fluctuations. This risk is due on the one hand to the fact that the German parent company purchases some goods and services in U.S. dollars. On the other hand, Epigenomics markets its primary product – Epi proColon – in the U.S.A., and revenue is generated by the Group's U.S. subsidiary, Epigenomics, Inc., in U.S. dollars, while the kits are manufactured and billed to the contract manufacturer primarily in euros. This leads to an increased foreign currency exchange (FX) risk for the Group. This risk is reduced by utilizing the proceeds generated in U.S. dollars to finance the operating business activities of Epigenomics, Inc. (e.g., to purchase goods and services). With regard to U.S. dollar amounts in excess of the U.S. subsidiary's mid- to long-term cash requirements, the Group will constantly try to mitigate or to eliminate the remaining risk as far as possible, for example through the use of derivative financial instruments (e.g., forward contracts). As of the balance sheet date, there was only a very limited number and volume of items denominated in foreign currencies other than the U.S. dollar.

The following table shows the carrying amounts of the Group's foreign currency denominated monetary assets and liabilities:

Primary financial instruments	Dec 31, 2017			Dec 31, 2018		
EUR thousand	Total	thereof in USD	in %	Total	thereof in USD	in %
Trade receivables	937	899	95.9	164	130	79.6
Marketable securities	905	0	0.0	653	0	0.0
Cash and cash equivalents	12,826	200	1.6	16,487	163	1.0
Other current assets	883	19	2.1	71	39	54.9
Trade payables	-952	-284	29.8	-1,411	-820	58.1
Convertible notes issued	-7,100	0	0.0	0	0	n/a
Other current liabilities	-231	-29	12.7	-267	-28	10.5
Total net position	7,267	804	11.1	15,695	-515	-3.3
thereof in third currencies	*-3*			*0*		

The sensitivity of the Group's net result and of shareholders' equity to foreign currency exchange rate fluctuations is shown in the table below:

EUR thousand Scenario	Impact on	2017	2018
10% increase in the EUR/USD rate	Total comprehensive income	-57	41
	Equity	445	749
10% decrease in the EUR/USD rate	Total comprehensive income	69	-50
	Equity	-544	-916

The table shows a stronger impact of exchange rate fluctuations on equity in the reporting year than in fiscal year 2017. This is mainly attributable to a significant increase in current liabilities denominated in U.S. dollars in the Group parent company's balance sheet.

37 CREDIT RISK

Credit risk (or default risk) is the risk that a counterparty fails to meet its obligations under a financial instrument or customer contract, resulting in a financial loss. The Company is regularly exposed to credit risks arising from its business and investment activities. This also affects deposits with banks and financial institutions

and other financial instruments.

The Company has allocated its cash and cash equivalents to three different banking institutions, which reduces the risk of default on bank deposits.

Securities have only been acquired under careful adherence to the Company's investment policy, i.e., a strict selection by the credit ratings of the issuers has been conducted. However, the global financial crisis in recent years has shown that even top-rated issuers can suddenly find themselves in a precarious situation or even facing collapse. Additionally, it has become clear that there is a constant risk of illiquid markets.

Customer credit default risk is monitored both centrally and by the Group unit responsible for managing the relevant customer relationships. Monitoring includes outstanding customer receivables and order volume. The Group currently considers the risk concentration with regard to trade receivables and contract receivables to be low, as these mainly relate to renowned business partners with impecc-able credit ratings on the one hand and small customers (primarily laboratories, clinics and universities) with insignificant order volumes on the other. Whenever possible, payments are collected in advance. The Company maintains long-term, good contractual relationships with its most important partners. In individual cases, it obtains security from its customers.

In order to estimate possible credit losses, trade receivables and open order backlogs are aggregated according to common credit risk characteristics (e.g. existing payment arrears in days).

The expected loss rates are based on the customer payment profiles as measured by sales over a period of at least 12 months before the end of each reporting period and the corresponding historical credit losses incurred during that period. Historical loss rates are adjusted as necessary to reflect current and forward-looking information about macroeconomic factors that affect customers' ability to pay receivables. The Company's existing customer base has a very low credit risk by these standards and the Company believes that the economic situation in the United States, China and Europe will remain sound, particularly with respect to the healthcare sector. Currently, the expected default rate on trade receivables and contract assets is 0%.

38 INTEREST RATE RISK

The Group holds interest-bearing financial instruments only in the form of marketable securities.

Given the historically low interest rates on the international capital markets, the Group is currently not exposed to any interest rate risks from its cash and cash equivalents item.

INFORMATION ON SHARE-BASED PAYMENT PLANS

39 DESCRIPTION OF STOCK OPTION PROGRAMS

As of the balance sheet date, the Company had four stock option programs (SOPs) in place:

Both the SOP 09–13 and SOP 11–15 programs have expired. Stock options can no longer be granted from these programs.

On May 25, 2016, the General Shareholders' Meeting resolved to implement a new stock option program (SOP 16–18) based on the new Conditional Capital XI (see also note 20 "Share Categories and Capital Structure"). Under this program, the Executive Board and the Supervisory Board of the Company were authorized, until the end of April 30, 2018, to issue stock options in accordance with the provisions set forth below to members of the Executive Board and to employees of the Company as well as to members of the management and to employees of domestic and foreign dependent companies of the Company provided that each stock option so issued entitles the beneficiary to subscribe for one non-par value registered share of the Company. Under this authorization, the Executive Board and the Supervisory Board have issued the maximum number of stock options, a total of 1,000,000, which entitle the beneficiaries to subscribe for no more than 1,000,000 non-par value registered shares of the Company.

The beneficiaries were the members of the Executive Board of the Company (group 1), the employees of the Company (group 2), the members of the management of subordinated Group companies (group 3) and the employees of subordinated Group companies (group 4).

The subscription rights may only be exercised outside the blackout periods. Blackout periods means the periods between the end of the fiscal year and the publication of the annual report and the consolidated financial statements for the respective fiscal year, and between the end of the first, second and third quarters of a fiscal year and the publication of a quarterly report or a quarterly announcement of the Company for the respective quarter.

A quarter of the subscription rights in every tranche shall vest for the beneficiaries one year, two years, three years and four years, respectively, after the issue date of the respective tranche. In deviation from the above provision, the Supervisory Board may declare full or partial vesting of subscription rights ssued in one tranche in favor of any one or all group 1 beneficiaries, and the Executive Board may with the consent of the Supervisory Board declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 2 to 4 beneficiaries, at any time after the issue date of the respective tranche. In this case, the subscription rights shall be deemed vested upon receipt by the respective beneficiary of the corresponding declaration by the Executive Board or the Supervisory Board.

Subscription rights of each tranche can be exercised for the first time after their vesting and after ex-piration of the waiting period. The waiting period ends four years after the issue date of the tranche. The restriction of the exercise of the subscription rights to certain exercise periods and subject to compliance with all exercise conditions shall remain unaffected by the expiration of the waiting period.

The term of the subscription rights of every tranche starts on the issue date of the subscription rights and ends seven years after such issue date. Subscription rights that have not been exercised by the end of their term shall expire without compensation. This shall also apply where the non-exercise of the subscription rights is attributable to the fact that they could not be exercised, and shall also apply to vested subscription rights.

The subscription rights can only be exercised against payment of the exercise price to the Company. The exercise price for a subscription right of the respective tranche equals the non-volume weighted average stock exchange closing price of the shares of the Company on the ten stock exchange trading days preceding the issue date of the tranche in the electronic trading system of the Frankfurt Stock Exchange plus 10%.

After vesting has occurred and after the waiting period has expired, subscription rights may be exercised only if the closing stock exchange price of the shares of the Company in the electronic trading system of the Frankfurt Stock Exchange has exceeded the original price by at least 10% on at least one trading day in the period between the issue date of the tranche and the expiration of the waiting period (performance target). If the performance target has not been reached upon expiration of the waiting pe-riod, the subscription rights shall expire without compensation.

Any subscription rights of a beneficiary that have not yet vested shall expire without compensation upon termination of the service or employment contract between the beneficiary and the Company (or a subordinated Group company) if the service or employment contract has been terminated by the bene-ficiary, or by the Company (or the respective subordinated Group company) for cause. This shall not apply to any termination by group 1 or group 3 beneficiaries on account of a vote of no confidence by the General Shareholders' Meeting. Subscription rights of a beneficiary that have vested but have not yet been exercised or could not yet be exercised by the respective beneficiary shall expire without compensation upon termination of the service or employment contract between the beneficiary and the Company (or a subordinated Group company) if the service or employment contract has been terminated by the Company (or the respective subordinated Group company) for cause. This shall not apply to any termination by group 1 or group 3 beneficiaries on account of a vote of no confidence by the General Shareholders' Meeting.

The Executive Board or, in the case of group 1 beneficiaries, the Supervisory Board, may reserve the right to fulfill subscription rights that have been validly exercised by paying to the beneficiary compensation in cash instead of delivering any newly issued or previously acquired treasury shares of the Company. Such cash compensation shall equal the difference between the exercise price and the closing price of the shares of the Company last determined in the electronic trading system of the Frankfurt Stock Exchange before the exercise of the subscription right. However, the Company has no obligation to offer cash compensation for exercised subscription rights and does not currently intend to offer such cash compensation for exercised subscription rights.

For further details on SOP 16–18, please see the invitation to the General Shareholders' Meeting on May 25, 2016. The document is available on the Company's website (*www.epigenomics.com*).

On May 30, 2017, the General Shareholders' Meeting resolved to implement a new stock option program (SOP 17–19) based on the new Conditional Capital XII (see also the section "Share Categories and Capital Structure"). Under this program, the Executive Board and the Supervisory Board of the Company were authorized, until the end of May 31, 2019, to issue stock options in accordance with the provisions set forth below to members of the Executive Board and to employees of the Company as well as to members of the management and to employees of domestic and foreign dependent companies of the Company provided that each stock option so issued entitles the beneficiary to subscribe for one non-par value registered share of the Company. Under this authorization, the Executive Board and the Supervisory Board may issue a total of up to 1,000,000 stock options which entitle the beneficiaries to subscribe for no more than 1,000,000 non-par value registered shares of the Company. Only the Supervisory Board of the Company is authorized to issue stock options to beneficiaries who are members of the Executive Board of the Company. In all other respects, the Executive Board is authorized to grant stock options, with the Executive Board being required to obtain the Supervisory Board's consent before granting stock options to holders of a general power of attorney (*Prokura*) of the Company and to members of the management of subordinated Group companies. The shareholders have no subscription rights.

The beneficiaries are the members of the Executive Board of the Company and members of the management of subordinated Group companies (group 1) and the employees of the Company and of subordinated Group companies (group 2). From the total volume of SOP 17–19, the distribution shall be as follows:

- Group 1 all beneficiaries: max. 68% or 680,000 stock options
- Group 2 all beneficiaries: max. 32% or 320,000 stock options

Stock options from the SOP 17–19 may only be issued once more before the end of the program, i.e., with effect from April 1, 2019. The subscription rights may only be exercised outside the blackout periods.

A quarter of the subscription rights in every tranche shall vest for the beneficiaries one year, two years, three years and four years, respectively, after the issue date of the respective tranche. In deviation from the above provision, the Supervisory Board may declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 1 beneficiaries, and the Executive Board may with the consent of the Supervisory Board declare full or partial vesting of subscription rights issued in one tranche in favor of any one or all group 2 beneficiaries, at any time after the issue date of the respective tranche. In this case, the subscription rights shall be deemed vested upon receipt by the respective beneficiary of the corresponding declaration by the Executive Board or the Supervisory Board.

Otherwise, the same terms of SOP 16–18 apply to the term, exercise and expiration of the subscription rights under the SOP 17–19.

For further details on SOP 17–19, please see the invitation to the General Shareholders' Meeting on May 30, 2017. The document is available on the Company's website (www.epigenomics.com*)*.

40 STOCK OPTION PROGRAMS – OUTSTANDING RIGHTS

No rights under SOP 09–13 were issued, exercised or forfeited in the reporting year. As of December 31, 2017, 2,000 rights with an average exercise price of EUR 11.05 were still outstanding, which expired during the reporting year; therefore, no rights were still outstanding as of December 31, 2018. None of these rights were held by members of the Company's Executive Board.

No rights under SOP 16–18 and 17–19 expired or were exercised with in the reporting year or in the previous year.

SOP 16–18	Options outstanding	Issued	forfeited	reclassified	Options outstanding	Options exercisable
	as of Jan 1, 2018 (2017)	Options in 2018 (2017)			as of Dec 31, 2018 (2017)	
Option holder						
Greg Hamilton (CEO)	160,000	67,500	0	0	227,500	0
	(91,580)	(68,420)	(0)	(0)	(160,000)	(0)
Albert Weber (EVP Finance)	0	0	0	30,000	30,000	0
	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)
Dr. Uwe Staub (COO)	22,500	0	0	-22,500	0	0
until March 31, 2018	(90,000)	(0)	(67,500)	(0)	(22,500)	(0)
Other option holders	455,250	298,750	56,250	-7,500	690,250	0
	(133,000)	(361,500)	(39,250)	(0)	(455,250)	(0)
All option holders	637,750	366,250	56,250	0	947,750	0
	(314,580)	(429,920)	(106,750)	(0)	(637,750)	(0)
Average exercise price	5.22	4.12	4.80	n/a	4.86	n/a
(in EUR)	(5.43)	(5.10)	(5.35)	(n/a)	(5.22)	(n/a)

SOP 17–19	Options outstanding	Issued	forfeited	reclassified	Options outstanding	Options exercisable
	as of Jan 1, 2018 (2017)	Options in 2018 (2017)			as of Dec 31, 2018 (2017)	
Option holder						
Greg Hamilton (CEO)	31,580	32,500	0	0	64,080	0
	(0)	(31,580)	(0)	(0)	(31,580)	(0)
Jorge Garces (COO)	0	85,000	0	0	85,000	0
	(0)	(0)	(0)	(0)	(0)	(0)
Albert Weber (EVP Finance)	0	70,000	0	0	70,000	0
	(0)	(0)	(0)	(0)	(0)	(0)
Dr. Uwe Staub (COO)	0	0	0	0	0	0

until March 31, 2018	(0)	(70,000)	(70,000)	(0)	(0)	(n/a)
Other option holders	51,000	131,250	7,500	0	174,750	0
	(0)	(51,000)	(0)	(0)	(51,000)	(0)
All option holders	82,580	318,750	7,500	0	393,830	0
	(0)	(152,580)	(70,000)	(0)	(82,580)	(0)
Average exercise price	5.10	4.12	4.12	n/a	4.33	n/a
(in EUR)	(n/a)	(5.10)	(5.10)	(n/a)	(5.10)	(n/a)

Contractual commitments to a total of 340,000 further rights were made to members of the Executive Board for award to them in 2019 and 2020, provided they are then available from the active SOP.

Terms of outstanding stock options of all programs:

	Weighted average exercise price (in EUR)	Stock options issued and outstanding	Weighted average exercise price (in EUR)	Stock options issued and outstanding
Term	Dec 31, 2017		Dec 31, 2018	
2018	11.05	2,000	n/a	0
2023	5.43	232,830	5.43	232,830
2024	5.10	487,500	5.10	487,500
2025	4.12	0	4.12	621,250
Total	5.22	722,330	4.70	1,341,580

41 STOCK OPTION PROGRAMS – VALUATION PARAMETERS

The fair value of SOP 16–18 and SOP 17–19 was determined using the Monte Carlo simulation. It was assumed that the rights will be exercised in the fifth year after the grant date if the market price of the shares exceeds the exercise price of the stock option rights by more than 20% or in the sixth year after the grant date if the market price of the shares exceeds the exercise price of the stock option rights by more than 10%. An earlier exercise of the rights is not permitted under the program terms and conditions.

The following table gives detailed information on both programs active over the balance sheet date and the applied valuation parameters.

SOP 16–18	Dec 31, 2017	Dec 31, 2018
Total number of outstanding options	637,750	947,750
thereof vested until end of term	*78,645*	*226,270*
thereof exercisable	*0*	*0*
Exercise prices (in EUR)	5.10–5.43	4.12–5.43
Weighted average term of outstanding rights in years	6.39	5.67
Weighted average fair value per option (EUR)	2.85	1.92
Applied share price volatility in %	84.40	84.32
Risk-free interest rate in %	-0.14	-0.04
Assumed staff turnover in %	4.00	5.88

Expiry dates	Oct 1, 2023– Oct 1, 2024	Oct 1, 2023– Apr 1, 2025

SOP 17–19	Dec 31, 2017	Dec 31, 2018
Total number of outstanding options	82,580	393,830
thereof vested until end of term	*0*	*20,645*
thereof exercisable	*0*	*0*
Exercise prices (in EUR)	5.10	4.12–5.10
Weighted average term of outstanding rights in years	6.76	6.15
Weighted average fair value per option (EUR)	2.65	2.09
Applied share price volatility in %	84.58	84.25
Risk-free interest rate in %	0.04	0.13
Assumed staff turnover in %	3.70	7.32
Expiry dates	Oct 1, 2024	Oct 1, 2024– Apr 1, 2025

The risk-free interest rates are derived from the yield curve of German government bonds at the valuation date. The volatility of the share price can be derived from the historical volatility of the shares (in accordance with Bloomberg data) over the most recent past period equaling the remaining term of the rights. For adjustment purposes, a constant staff turnover was assumed based on the historical turnover of the Company's staff over the past four years. No dividend payments were assumed during the term of the rights (i.e., the assumed dividend yield was 0%).

42 PHANTOM STOCK PROGRAMS – DESCRIPTION

As of the balance sheet date, the Company had four phantom stock programs (PSPs)/virtual share plans in place as an incentive scheme for management and staff by granting so-called phantom stock rights (PSRs) from such programs to the beneficiaries. The programs define a PSR as a conditional claim of its holder against the Company for a future payment in cash of a premium to the benefit of the holder. As PSRs will be settled in cash upon their exercise, the Company had to record a provision based on the fair values of the outstanding rights.

Phantom stock program 03–15 (PSP 03–15)

PSP 03–15 was established in 2013 to serve as a transformation tool for outstanding stock options at that time. Executive Board and Supervisory Board of the Company therefore had decided to offer PSRs from the PSP 03–15 to all stock option holders who were employees or members of the Executive Board at that time and to a dedicated number of former employees of the Company who still held stock options. For each stock option right returned to the Company in connection with an exchange offer, one PSR from PSP 03–15 was granted to its holder. Each PSR from PSP 03–15 became the legal successor of the returned stock option right then and was on equal terms with its economic value. Hence, the term of each PSR from PSP 03–15 equals the remaining term of the returned stock option right. These PSRs will expire without compensation at that point in time when the stock option right that has been returned in exchange would have expired. After the exchange of previously unvested stock option rights against PSRs, the vesting rules of the underlying SOPs applied equally with respect to the vesting of the PSRs. PSRs which were issued in exchange for vested stock options also vested immediately. Vested PSRs obtained in exchange for stock options from the SOP 06–10 can be exercised immediately. Vested PSRs obtained in exchange for stock options from SOP 09–13 and SOP 11–15 can only be exercised when the holding or waiting period of the stock options returned in exchange is or would have expired for its holder.

The exercise price of a PSR from PSP 03–15 equals the exercise price of the stock option right returned in exchange. The exercise of such a PSR simulates the exercise of the former stock option right in a so-called "ExerSale" transaction. Unlike the exercise of stock option rights, the holder of a PSR is not en-titled to subscribe to a share of the Company by exercising a PSR. Upon the exercise of a PSR from PSP 03–15, the holder of the right obtains a claim against the Company for the payment of the PSR pre-mium. The PSR premium is defined as the absolute difference between the then-current market price for Epigenomics shares and the exercise price

of the PSR. Holders of PSRs are entitled to exercise their right during the exercise period when the strike price at the exercise date is higher than the base value. The strike price equals the arithmetic average of the Xetra closing rates for Epigenomics shares on the Frankfurt Stock Exchange on the five consecutive trading days prior to the exercise date. By exercising the PSR, the holder earns an entitlement to obtain the "PSR premium" from the Company. The PSR premium equals the absolute difference between strike price and base value of the right without any limitation. In contrast to the exercise of stock option rights, the exercise of PSRs is not compulsory subject to pre-defined exercise periods ("trading windows") and can be done at any time during the year. Nevertheless, the Executive Board and the Supervisory Board may stipulate compulsory exercise periods for holders of PSRs who are current employees of the Company. This applies in particular to holders of PSRs who are identified as "insiders" within the meaning of the German Securities Trading Act (Wertpapier-handelsgesetz – WpHG). It is left to the sole discretion of the Company's Executive Board to define and announce such exercise periods to the employees of the Company holding PSRs. Such exercise periods as determined by the Executive Board will then always apply simultaneously to the Executive Board members.

A takeover or a mandatory offer for the shares of the Company in accordance with the German Securities Acquisition and Takeover Act (Wertpapiererwerbs- und Übernahmegesetz – WpÜG) entitles the holders of vested PSRs to exercise these rights in full. This also applies if the waiting period for these rights has not yet expired. The exercise right for the PSR holder shall apply only if the offered consideration consists solely of a cash settlement and if the bidder has gained control over the Company. In the event of a takeover, the PSR premium equals the difference between the cash amount which was finally offered to the shareholders as part of a takeover or a mandatory offer and the base value of the PSR.

Phantom stock program 2013 (PSP 2013), phantom stock program 2014 (PSP 2014), and phantom stock program 2015 (PSP 2015)

PSP 2013 was approved by the Executive Board and the Supervisory Board of the Company in May 2013. PSP 2014 was approved by the Executive Board and the Supervisory Board of the Company in May 2014. PSP 2015 was approved by the Executive Board and the Supervisory Board of the Company in September 2015.

No further rights can be issued from PSP 2013, PSP 2014, and PSP 2015. The eligible beneficiaries of these programs were the members of the Executive Board and Group employees with an unterminated service or employment agreement with a Group company. The Executive Board decided on issuing PSRs from these programs to employees of the Company and to executives and employees of the subsid-iaries. The Supervisory Board decided on issuing PSRs to the members of the Executive Board.

A certain number of PSRs granted to a beneficiary at a certain point in time is defined as a tranche. The PSRs of each tranche issued to beneficiaries who were not members of the Company's Executive Board at the issuance date started to vest from the beginning of the first full calendar quarter over the three years following their issuance in five equal parts, beginning with the first day of the fifth full calendar quarter after the issuance of the tranche. Thereafter, the further four of the five parts each vest after the end of the following four half-years. Thus, the last of the five parts vests after the last day of the twelfth full calendar quarter following issuance of the tranche and therefore at the end of a three-year waiting period. PSRs of each tranche can only be exercised after their vesting, but not before the end of the waiting period. The term of the PSRs begins with their issuance and ends five years after the beginning of their vesting period. Rights not exercised upon the end of their term expire without compensation. PSRs can generally be exercised at any time in the two years between the end of their waiting period and the end of their term ("exercise period"). Nevertheless, the Executive Board and Supervisory Board can stipulate adherence to timing restrictions in the exercise periods. This applies in particular to holders of rights who are identified by the Executive Board as an "insider" within the meaning of section 15b WpHG. The Executive Board of the Company reserves the right to establish such timing restrictions in the exercise periods and to announce such restrictions in the exercise periods to rights holders who are employees of the Company at that date. Timing restrictions in exercise periods as announced by the Executive Board will always apply simultaneously to PSRs held by the Executive Board members themselves.

At the issuance of a PSR tranche, a so-called "base value" of the rights was determined. This base value equaled the average of the Xetra closing rates for Epigenomics shares on the Frankfurt stock exchange on the last five trading days before issuance. Holders of PSRs are entitled to exercise their right during the exercise period when the strike price at the exercise date is higher than the base value. The strike price equals the arithmetic average of the Xetra closing rates for Epigenomics shares on the Frankfurt Stock Exchange on the five consecutive trading days prior to the exercise date. By exercising the PSR, the holder earns an entitlement to obtain the "PSR premium" from the Company. The PSR premium equals the absolute difference between the strike price and the base value of the right up to a maximum of EUR 8.00 (PSP 2013), EUR 12.00 (PSP 2014), or EUR 15.00 (PSP 2015).

Any PSRs held by a beneficiary that have not yet vested expire without compensation upon termination of the service or employment agreement by the beneficiary or if the service or employment agreement has been terminated by the Company for cause. Any PSRs held by a beneficiary that have not yet vested shall remain valid if the Company terminates the service or employment agreement due to oper-ational reasons. If the service or employment agreement is terminated by mutual consent, it is left to the sole discretion of the Executive Board or the Supervisory Board to decide whether those PSRs held by the beneficiary that have not yet vested at that point in time remain valid. If holders of vested PSRs leave the Company before the expiry date of those rights, they remain entitled to such vested rights until the expiry date. In such case, the strike price of their rights from PSP 2014 and PSP 2015 will be limited to the arithmetic average of the Xetra closing rates on the Frankfurt stock exchange on the five consecutive trading days prior to the final termination date of their employment agreement with the Company.

A takeover or a mandatory offer for the shares of the Company in accordance with the WpÜG entitles the holders of vested PSRs to exercise these rights in full. This also applies if the waiting period for these rights has not yet expired. The exercise right for the PSR holder will only apply if the offered consideration consists solely of a cash settlement and if the bidder has gained control over the Company. In the event of a takeover, the PSR premium equals the difference between the cash amount which was finally offered to the shareholders as part of a takeover or a mandatory offer and the base value of the PSR. However, the limitation of the PSR premium to EUR 8.00 (PSP 2013), EUR 12.00 (PSP 2014), and EUR 15.00 (PSP 2015) will still apply in such case.

43 PHANTOM STOCK PROGRAMS – OUTSTANDING RIGHTS

No rights under the Company's PSPs were issued in the reporting year or in the previous year.

Phantom stock program 03–15 (PSP 03–15)

No previously issued rights under PSP 03–15 were forfeited either in the reporting year or in the previous year.

PSP 03–15 Beneficiaries	Reporting year	Rights held as of Jan 1	Rights			Rights held as of Dec 31
			expired	exercised	reclassified	
Dr. Uwe Staub (COO)	2018	22,400	22,400	0	0	0
until March 31, 2018	2017	28,800	6,400	0	0	22,400
Other beneficiaries	2018	75,800	55,800	0	0	20,000
	2017	119,413	27,263	16,350	0	75,800
Total	2018	98,200	78,200	0	0	20,000
	2017	148,213	33,663	16,350	0	98,200
Average base value	2018	5.98	6.87	n/a	n/a	2.51
(EUR/right)	2017	8.53	18.89	2.51	n/a	5.98

Phantom stock program 2013 (PSP 2013)

No previously issued rights under PSP 2013 were forfeited either in the reporting year or in the previous year.

PSP 2013 Beneficiaries	Reporting year	Rights held as of Jan 1	Rights			Rights held as of Dec 31
			expired	exercised	reclassified	
Dr. Uwe Staub (COO)	2018	20,000	0	0	-20,000	0
until March 31, 2018	2017	20,000	0	0	0	20,000
Other beneficiaries	2018	78,000	10,000	65,000	20,000	23,000
	2017	136,000	0	58,000	0	78,000
Total	2018	98,000	10,000	65,000	0	23,000
	2017	156,000	0	58,000	0	98,000
Average base value	2018	2.70	1.64	1.62	6.15	6.19
(EUR/right)	2017	2.55	n/a	2.29	n/a	2.70

Phantom stock program 2014 (PSP 2014)

No previously issued rights under PSP 2014 were forfeited either in the reporting year or in the previous year.

PSP 2014 Beneficiaries	Reporting year	Rights held as of Jan 1	Rights			Rights held as of Dec 31
			expired	exercised	reclassified	
Albert Weber (EVP Finance)	2018	0	0	0	30,000	30,000
since January 1, 2018	2017	n/a	n/a	n/a	n/a	n/a
Dr. Uwe Staub (COO)	2018	60,000	0	0	-60,000	0
until March 31, 2018	2017	60,000	0	0	0	60,000
Other beneficiaries	2018	263,833	0	69,000	30,000	224,833
	2017	271,633	0	7,800	n/a	263,833
Total	2018	323,833	0	69,000	0	254,833
	2017	331,633	0	7,800	n/a	323,833
Average base value	2018	3.23	n/a	3.23	3.23	3.23
(EUR/right)	2017	3.23	n/a	3.23	n/a	3.23

Phantom stock program 2015 (PSP 2015)

No previously issued rights under PSP 2015 were forfeited either in the reporting year or in the previous year.

PSP 2015 Beneficiaries	Reporting year	Rights held as of Jan 1	Rights			Rights held as of Dec 31
			expired	exercised	reclassified	
Albert Weber (EVP Finance)	2018	0	0	0	10,000	10,000
since January 1, 2018	2017	n/a	n/a	n/a	n/a	n/a
Dr. Uwe Staub (COO)	2018	14,400	0	0	-14,400	0
until March 31, 2018	2017	24,000	9,600	0	0	14,400
Other beneficiaries	2018	84,000	0	0	4,400	88,400
	2017	84,000	0	0	0	84,000
Total	2018	98,400	0	0	0	98,400
	2017	108,000	9,600	0	0	98,400
Average base value	2018	5.05	n/a	n/a	5.05	5.05
(EUR/right)	2017	5.05	5.05	n/a	n/a	5.05

44 PHANTOM STOCK PROGRAMS – VALUATION PARAMETERS

The fair value of all PSR was calculated by using the binomial approach based on the Cox-Ross-Rubinstein model. For PSP 03–15 it was assumed that the rights will be exercised after their waiting period if the market price of the shares exceeds the base value of the PSR by more than 10%. For PSP 2013, PSP 2014, and PSP 2015 it was assumed that the rights will be exercised in the fourth year after the grant date if the market price of the shares exceeds the base value of the PSR by more than 20% or in the fifth year after the grant date if the market price of the shares exceeds the base value of the PSR by more than 10%. An earlier exercise of the rights is not permitted under the program terms and conditions.

The following table gives detailed information on all programs and the applied valuation parameters.

PSP 03–15	Dec 31, 2017	Dec 31, 2018
Total number of outstanding PSRs	98,200	20,000
thereof vested until end of term	*98,200*	*20,000*
thereof exercisable	*98,200*	*20,000*
Base value of PSR (in EUR)	2.51–11.05	2.51
Aggregate adjusted fair value of PSRs (in EUR thousand)	76	0
Aggregate maximum payments if PSRs are exercised (in EUR thousand)[1]	n/a	n/a
Weighted average term of outstanding rights (in years)	0.62	0
Weighted average fair value (EUR/PSR)	0.77	0
Applied share price volatility in %	44.58	27.12
Risk-free interest rate in %	-0.72	-0.65
Assumed staff turnover in %	0.0	0.0
Expiry dates	Jan 1, 2018– Jan 1, 2019	Jan 1, 2019

[1] *The aggregate maximum payment to be made by the Company upon exercise of all outstanding rights under PSP 03–15 cannot be calculated as the program does not provide for a cap on the PSR premium.*

PSP 2013	Dec 31, 2017	Dec 31, 2018
Total number of outstanding PSRs	98,000	23,000
thereof vested until end of term	*98,000*	*23,000*
thereof exercisable	*98,000*	*23,000*
Base value of PSR (in EUR)	1.62–6.45	6.15–6.45
Aggregate adjusted fair value of PSRs (in EUR thousand)	202	0
Aggregate maximum payments if PSRs are exercised (in EUR thousand)	784	184
Weighted average term of outstanding rights (in years)	0.71	0.22
Weighted average fair value (EUR/PSR)	2.06	0
Applied share price volatility in %	56.85	31.11
Risk-free interest rate in %	-0.72	-0.80
Assumed staff turnover in %	0.0	0.0
Expiry dates	Jul 1, 2018– Apr 1, 2019	Jan 1, 2019– Apr 1, 2019

PSP 2014	Dec 31, 2017	Dec 31, 2018
Total number of outstanding PSRs	323,833	254,833
thereof vested until end of term	*323,833*	*254,833*
thereof exercisable	*323,833*	*254,833*
Base value of PSR (in EUR)	3.23–3.70	3.23–3.70
Aggregate adjusted fair value of PSRs (in EUR thousand)	329	18
Aggregate maximum payments if PSRs are exercised (in EUR thousand)	3,113	2,153
Weighted average term of outstanding rights (in years)	1.78	0.76
Weighted average fair value (EUR/PSR)	1.02	0.07
Applied share price volatility in %	58.66	78.04
Risk-free interest rate in %	-0.68	-0.74
Assumed staff turnover in %	0.0	0.0
Expiry dates	Oct 1, 2019	Oct 1, 2019

PSP 2015	Dec 31, 2017	Dec 31, 2018
Total number of outstanding PSRs	98,400	98,400
thereof vested until end of term	*88,400*	*98,400*
thereof exercisable	*0*	*98,400*
Base value of PSR (in EUR)	5.05	5.05
Aggregate adjusted fair value of PSRs (in EUR thousand)	39	1
Aggregate maximum payments if PSRs are exercised (in EUR thousand)	591	383
Weighted average term of outstanding rights (in years)	2.79	1.75
Weighted average fair value (EUR/PSR)	0.42	0,02
Applied share price volatility in %	74.95	66.61
Risk-free interest rate in %	-0.52	-0.63
Assumed staff turnover in %	0.47	0.00
Expiry dates	Oct 1, 2020	Oct 1, 2020

The risk-free interest rates are derived from the yield curve of German government bonds at the valu-ation date. The volatility of the share price can be derived from the historical volatility of the shares (in accordance with Bloomberg data) over the most recent past period equaling the remaining term of the rights. For adjustment purposes, a constant staff turnover was assumed based on the historical turnover of the Company's staff over the past three years. No dividend payments were assumed during the term of the rights (i.e., the assumed dividend yield was 0%).

The aggregate adjusted fair value of the rights granted under all programs amounted to EUR 20 thousand as of December 31, 2018 (December 31, 2017: EUR 647 thousand). This was recognized as a non-current provision of EUR 0 thousand and a current provision of EUR 20 thousand as of the balance sheet date.

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INFORMATION ON THE EXECUTIVE BOARD AND THE SUPERVISORY BOARD OF THE COMPANY AND THEIR REMUNERATION

In the reporting year, the Company's Executive Board consisted of Greg Hamilton as Chief Executive Officer, Jorge Garces, Ph.D., as Chief Scientific Officer, and Albert Weber as Executive Vice President Finance. Dr. Uwe Staub was a member of the Company's Executive Board and served as Chief Operating Officer until March 31, 2018.

The remuneration of the members of the Company's Executive Board comprises a fixed and a variable component. The variable amount is determined on the basis of a variety of criteria, including the achievement of individual performance targets and Company performance targets, which are set by the Supervisory Board on a yearly basis. Apart from the fixed and the variable component, a third remuneration component consists of a long-term performance-based compensation in the form of phantom stock rights (PSRs) and stock options. In addition, the Executive Board members are beneficiaries of a D&O insurance policy with excess set at the statutory minimum amount. They also receive full reimbursement of their business travel expenses and other incidental benefits detailed in the remuneration report section of the Group management report 2018.

In 2018, total remuneration of the members of the Executive Board based on the benefits granted amounted to EUR 2,376 thousand (2017: EUR 1,451 thousand)[1] and comprised:

EUR thousand	2017	2018
Fixed remuneration	786	1,265
One-year variable remuneration	269	664
Multi-year variable remuneration	396	447
Total remuneration (granted benefits)	1,451	2,376

[1] *Note: The Executive Board's total remuneration for 2017 reported in the 2017 Annual Report amounted to EUR 1,224 thousand. The EUR 1,451 thousand difference between this year's figure and the amount reported in the previous year is due to the fact that in 2017 the stock options reported as multi-year variable remuneration had been recognized as an expense in the income statement. However, in accordance with the German Corporate Governance Code, the fair value of the stock options upon their issue date should be reported here. The previous year's misstatement is hereby corrected.*

The multi-year variable compensation of the Executive Board members in 2018 comprised 255,000 stock options (2017: 170,000).

Based on the allocations (cash payments), the total remuneration of the members of the Executive Board amounted to EUR 1,732 thousand (2017: EUR 980 thousand) and comprised:

EUR thousand	2017	2018
Fixed remuneration	786	1,265
One-year variable remuneration	194	467
Multi-year variable remuneration	0	0
Total remuneration (allocations)	980	1,732

In the event of a change of control, all Executive Board members have a special right to terminate their service agreements and would in such case be entitled to receive payment of their fixed remuneration for the remaining term of their service agreements. In no case will such payment exceed 150% of the severance payment cap in accordance with section 4.2.3 of the German Corporate Governance Code.

The Supervisory Board of the Company remained unchanged in the reporting year and comprised the following members: Heino von Prondzynski, Einsiedeln (Switzerland) as Chairman, Dr. Ann Clare Kessler, Rancho Santa Fe, CA (U.S.A.), and Prof. Günther Reiter, Pfullingen (Germany) as Deputy Chairman, and Dr. Helge Lubenow, Langenfeld/Rheinland (Germany).

The remuneration structure for the Supervisory Board is based on an annual cash retainer ("fixed remuneration") and meeting-related payments ("variable remuneration"). The remuneration does not include any performance-related elements or long-term incentive components. In 2018, total remuneration of the members of the Supervisory Board amounted to EUR 253 thousand (2017: EUR 248 thousand) and comprised:

EUR thousand	2017	2018
Fixed remuneration	200	205
Variable remuneration	48	48
Total remuneration	248	253

Further details to the composition of the Executive Board and the Supervisory Board and details of the remuneration of their members in the reporting year can be found in the "Remuneration Report" section of the Group management report 2018.

46 OTHER FINANCIAL OBLIGATIONS

EUR thousand	Term < 1 year	Term 1–5 years
Financial obligations from commercial lease agreements	317	31
Financial obligations from licensing agreements	47	0
Financial obligations from operating rental, lease, maintenance and service agreements	22	0
Financial obligations from manufacturing orders	467	0
Financial obligations from the purchase of goods and services	940	1
Total financial obligations	1,793	32

For the Epigenomics Group, obligations from commercial lease agreements arise from a lease at the Berlin location and a sublease at the San Diego, CA, location. For the office and lab space at Geneststrasse 5, there is a fixed-term lease with a term expiring on April 30, 2020. The Company has the option to extend the lease by six more years. In the reporting year, the total expenses for lease payments and incidental costs under this agreement amounted to EUR 123 thousand (2017: EUR 120 thousand). For the office and lab space in San Diego, there is a fixed-term lease with a term expiring October 31, 2019. In the reporting year, the total expenses for lease payments and incidental costs under this agreement amounted to EUR 77 thousand (2017: EUR 0 thousand).

The U.S. subsidiary has rented office space at its Germantown, MD, location. This lease may be termin-ated at short notice.

In the previous years, Epigenomics acquired numerous exclusive licenses to third-party intellectual property. This means that there are some obligations to pay minimum license fees in years to come. Add-itionally, Epigenomics has the obligation to reimburse most of those third parties for costs incurred in connection with the maintenance and the prosecution of the licensed rights. Those costs are mainly fees for patent attorneys or patent office actions and their amounts and timing are difficult to forecast.

47 INFORMATION ON THE COMPANY'S AUDITOR APPOINTED BY THE GENERAL SHAREHOLDERS' MEETING

At the Company's Annual General Shareholders' Meeting in May 2018, Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft was engaged to audit the Company's annual financial statements and consolidated financial statements for fiscal year 2018. During the reporting year, a total amount of EUR 213 thousand (2017: EUR 141

thousand) was expensed for miscellaneous services of this auditing firm for Epigenomics AG. Details are shown in the following table:

EUR thousand	2017	2018
Costs for audit services	141	126
Costs for other assurance services	0	87
Total	141	213

The costs disclosed for audit services relate to the audits of the separate financial statements of Epigenomics AG in accordance with German GAAP as well as the consolidated financial statements for the Epigenomics Group in accordance with IFRSs, and on reviews of the interim statements. The costs for other assurance services were incurred in connection with the Company's capital increase in October 2018.

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DECLARATION OF THE EXECUTIVE BOARD AND THE SUPERVISORY BOARD OF EPIGENOMICS AG PURSUANT TO SECTION 161 AKTG ON THE GERMAN CORPORATE GOVERNANCE CODE

In October 2018, the Executive Board and the Supervisory Board of the Company issued an updated declaration of compliance pursuant to section 161 of the German Stock Corporation Act (Aktiengesetz – AktG). The declaration was published on the Company's website (*www.epigenomics.com/news-investors/-corporate-governance/*).

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INFORMATION ON OTHER TRANSACTIONS WITH RELATED PARTIES

As of the reporting date, the Company's liabilities due to members of its Executive Board amounted to EUR 120 thousand (December 31, 2017: EUR 84 thousand) and liabilities due to members of its Supervisory Board amounted to EUR 0 thousand (December 31, 2017: EUR 32 thousand). There were no other transactions with related parties during the reporting year.

50 REPORT ON POST-BALANCE SHEET DATE EVENTS

After the balance sheet date, the Company published a notice to the capital market on March 6, 2019, regarding its decision to terminate the collaboration with its Chinese partner BioChain regarding the licensing of the Septin9 marker and the exclusive distribution rights in China for Epi proColon with immediate effect. Epigenomics exercised its contractual right to terminate the agreement if BioChain did not pay Epigenomics more than the contractually agreed minimum license fees over a period of three years. The Company will review all options for the distribution of Septin9 in China to maximize the full potential of the test in this key market. No other events occurred after the balance sheet date which could materially affect the Company's net assets, financial position and results of operations or its risk assessment

51 APPROVAL FOR PUBLICATION

The Executive Board of Epigenomics AG approved the consolidated financial statements on March 20, 2019, for submission to the Supervisory Board. The Supervisory Board is responsible for reviewing the consolidated financial statements and declaring whether it approves them. The consolidated financial statements and the individual financial statements of Epigenomics AG as well as the annual report will be published on March 27, 2019, after approval at the Supervisory Board meeting on March 26, 2019.

Berlin, March 20, 2019

The Executive Board

RESPONSIBILITY STATEMENT

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements 2018 give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Berlin, March 20, 2019

The Executive Board

LIST OF ABBREVIATIONS

ADMIT	Adherence to Minimally Invasive Testing
ADR	American Depositary Receipts
AktG	German Stock Corporation Act (Aktiengesetz)
ARUP	ARUP Laboratories
CFDA	China Food and Drug Administration
CMS	Centers for Medicare & Medicaid Services
CPT	Current Procedural Terminology
CUSIP	Committee on Uniform Security Identification Procedures
EBIT	Earnings before interest and taxes
EBITDA	EBIT before depreciation and amortization
ECB	European Central Bank
ERP	Enterprise Resource Planning
EU	European Union
FDA	Food and Drug Administration
Fed	Federal Reserve System
FIT	Fecal immunochemical test
GDP	Gross domestic product
GMP	Good manufacturing practice
GSTP1	DNA methylation biomarkers, intellectual property by Epigenomics
HGB	German Commercial Code (Handelsgesetzbuch)
HPV	Human Papilloma Virus
IAS	International Accounting Standards
IASB	International Accounting Standards Board
ICR	Internal control and risk management system
IDW	Institute of Public Auditors in Germany (Institut der Wirtschaftsprüfer)
IFRS	International Financial Reporting Standards

IMF	International Monetary Fund
IPO	Initial public offering
ISIN	International Securities Identification Number
ISO	International Organization for Standardization
IVD	In vitro diagnostic
KonTraG	German Corporation Sector Supervision and Transparency Act (Gesetz zur Kontrolle und Transparenz im Unternehmensbereich)
LDT	Laboratory-developed test
M&A	Mergers & Acquisitions
NCD	National Coverage Determination
NGS	Next Generation Sequencing
OECD	Organisation for Economic Co-operation and Development
OTCQX	Over-the-counter stock exchange
PAL	Principal American Liaison
PCR	Polymerase Chain Reaction
PMA	Premarket approval
PSP	Phantom stock program
PSR	Phantom stock rights
R&D	Research and Development
Septin9	DNA methylation biomarkers, intellectual property by Epigenomics
SHOX2	DNA methylation biomarkers, intellectual property by Epigenomics
SO	Stock options
SOP(s)	Stock option program(s)
USPSTF	United States Preventive Services Task Force
WpÜG	German Securities Acquisition and Takeover Act (Wertpapiererwerbs- und Übernahmegesetz)

INDEPENDENT AUDITOR'S REPORT

To Epigenomics AG, Berlin

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND THE GROUP MANAGEMENT REPORT

Audit opinion

We have audited Epigenomics AG and its subsidiary's (the Group) consolidated financial statements which comprise the consolidated balance sheet as of December 31, 2018, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated cash flow statement for the fiscal year from January 1, 2018 through December 31, 2018 as well as the notes to the Consolidated Financial Statements, including a summary of significant accounting methods. In addition, we have audited Epigenomics AG's management report for the fiscal year from January 1, 2018 through December 31, 2018.In accordance with German legal requirements, we have not audited the statement on corporate governance and the compliance statement contained in the management report's section "Corporate Governance".

In our opinion, based on the knowledge obtained in the audit

the accompanying consolidated financial statements comply, in all material respects, with IFRS as applicable in the EU and the supplementary provisions pursuant to German commercial law (Art. 315e Sec. 1 HGB (German Commercial Code)) and give, in compliance with such provisions, a true and fair view of the net assets and financial performance of the Group as at December 31, 2018 and of its profit situation for the financial year from January 1, 2018 to December 31, 2018 in compliance with German Legally Accounting Principles; and

the accompanying group management report as a whole provides an appropriate view of the Company's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future developments. Our audit opinion on the group management report does not cover the content of the aforementioned statement on corporate governance and the compliance statement.

Pursuant to Art. 322 Sec. 3 sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements' and the group management report.

Basis for our opinion

We have conducted our audit of the consolidated financial statements and of the group management report in accordance with Art. 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for the Financial Statements Audit promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under these requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the group management report" section of our auditor's report. We are independent of the Group companies in accordance with the requirements of European and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) (f) of the EU Audit Regulation, we declare that we have not provided any non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the consolidated financial statements and on the group management report.

Key audit matters in the audit of the consolidated financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the fiscal year from January 1, 2018 through December 31, 2018. These matters have been taken into account in connection with our audit of the consolidated financial statements as a whole, and in forming our audit opinion related herewith; we do not express a separate audit opinion on these matters.

From our perspective, the following matters were of most significance during our audit:

Revenue recognition
Stock options

We have structured our presentation of these key audit matters as follows:

1. Facts and problems
2. Audit approach and findings
3. Reference to further information

In the following, we will present these key audit matters:

Revenue recognition:

1. During the financial year, the Company recognized sales revenues in the amount of ca. EUR 1.5 million. Sales revenues are one of the most significant financial performance indicators in the capital market communication. These sales revenues include sales of the only main product in the amount of EUR 0.8 million and license revenues in the amount of EUR 0.6 million. Product sales are mainly realized by means of sales to few major customers. In general, there are framework agreements with these customers which may be supplemented by further agreements. These agreements may be decisive as to whether a sale has been realized. An incomplete presentation of these additional agreements within the scope of revenue recognition poses a risk, which is why we believe this matter is of particular importance.

2. We have convinced ourselves from the correct recognition of sales by means of the framework agreements, external confirmations as to possibly existing additional arrangements, proofs of delivery as well as the outgoing invoices and the related incoming payments. We could convince ourselves that any conditions additionally agreed upon with the major customers have been appropriately processed during the revenue recognition's assessment.

3. The Company's statements on the revenue recognition are contained in the consolidated financial statements' notes' section "Notes to the consolidated statement of comprehensive income (consolidated income statement and other results – 1 Sales Revenues".

Stock options:

1. As of the balance sheet date, stock option programs (AOP - "Equity settled share based payments") have been recognized in the Company's consolidated financial statements. During the reporting year, further commitments for AOPs have been granted to employees. The AOPs are presented in the consolidated financial statements under the relevant expense positions (cost of sales, research and development costs as well as distribution and administration costs) as well as equity. An amount of EUR 1.2 million of AOPs has been recognized as costs through profit and loss. The Company uses an external expert for the valuation of AOPs. From our perspective, share-based remuneration programs were of

particular importance as they depend to a major extent from the legal representatives' assessments and estimates and are thus afflicted by uncertainties.

2. Based upon the knowledge that estimated values provide for an increased risk of misstatements in the financial reporting and that the legal representatives' assessment decisions have a direct and clear impact on the consolidated financial statements, we have convinced ourselves from the valuation parameters' (such as risk-free interest and the shares' volatility) appropriateness by means of contract and company data and by involving a specialist's expertise and have assessed the new commitments' valuations' appropriateness. Based on that, we audited the accounting effect in the consolidated statement of comprehensive income (consolidated income statement and other results) and in the consolidated balance sheet. The management board's underlying estimates and assessments made are within a reasonable range.

3. The Company's information on the stock option program's valuation is contained in the Notes to the Consolidated Financial Statements in section "Expenses for share-based remuneration" and "Description of stock-option programs".

Other information

The legal representatives are responsible for other information. Other information comprises:

- Responsibility statement by the legal representatives in the 2018 annual management report's section "Responsibility Statement"
- Compliance statement in the section "Corporate Governance" of the 2018 Group Management Report
- Declaration on corporate governance in the section "Corporate Governance" of the 2018 Group Management Report
- The section "Foreword by the Executive Board" in the 2018 annual report, and
- The Section "Our share" in the 2018 annual report

The supervisory board is responsible for the following other information:

- The section "Report of the Supervisory Board" in the 2018 annual report.

Our audit opinions on the consolidated financial statements and on the group management report do not cover other information, and consequently we do not express an audit opinion or any other form of audit conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in doing so, to assess whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained during the audit; or
- otherwise seems to have been materially misstated.

Responsibilities of the Legal Representatives and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The legal representatives are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Art. 315e Sec. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the net assets, liabilities, financial position, and financial performance of the company. In addition, the executive directors are responsible for such internal controls they have determined necessary in order to enable the preparation of consolidated financial statements that are free from material misstatements, whether due to fraud or error.

In preparing the consolidated financial statements, the legal representatives are responsible for assessing the Company's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting on a going concern basis unless they intend to liquidate the Group or to discontinue business operations or in case there is no realistic alternative but to do so.

Furthermore, the legal representatives are responsible for the preparation of the group management report that, as a whole, provides a true and fair view of the Company's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the legal representatives are responsible for such arrangements and measures (systems) they have considered necessary to enable the preparation of a group management report in accordance with the applicable German legal requirements and to be able to provide sufficient appropriate evidence for the statements made in the group management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and the Group Management Report

Our objective is to obtain reasonable assurance as to whether the consolidated financial statements as a whole are free from material misstatements, whether due to fraud or error, and whether the group management report as a whole presents a true and fair view of the Group's position and is, in all material respects, consistent with the consolidated financial statements and the knowledge obtained during our audit, complies with German legal requirements and appropriately presents the opportunities and risks of the Group's future development, as well as to issue an audit report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit con-ducted in accordance with Art. 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for the Audit of Financial Statements promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect any material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and the group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- identify and assess the risks of material misstatements in the consolidated financial statements and the group management report, whether due to fraud or error, plan and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting any material misstatements resulting from fraud is higher than for those resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls;
- obtain an understanding of the internal control system relevant for the audit of the consolidated financial statements and of arrangements and measures relevant for the audit of the group management report, in order to plan audit procedures that are appropriate under the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems;
- evaluate the appropriateness of accounting policies applied by the legal representatives and the reasonableness of accounting estimates and applicable disclosures made;

- conclude on the appropriateness of the legal representatives' use of the going concern basis and, based on the audit evidence obtained, whether a material uncertainty exists in related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude a material uncertainty exists, we are required to draw attention to the related disclosures in the annual financial statements in the auditor's report and in the management report or, if such disclosures are inadequate, to modify our respective audit opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern;
- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the Group's net assets, financial performance and profit situation in compliance with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Art. 315e Sec. 1 HGB;
- obtain sufficiently appropriate audit evidence regarding the financial information of the entities or business activities within the Group in order to express audit opinions on the consolidated financial statements and on the Group Management Report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions;
- evaluate the group management report's consistency with the consolidated financial statements, its conformity with German law, and its presentation of the Group's position;
- perform audit procedures on the prospective information presented by the legal representatives in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the legal representatives as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be expected to affect our independence and, where applicable, the applied safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current reporting period and are therefore the key audit matters. We describe these matters in our auditor’s report unless law or regulations preclude public disclosure about the matter.

OTHER LEGAL AND REGULATORY REQUIREMENTS

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on May 30, 2018. We were engaged by the supervisory board on August 23, 2018. We have been the group auditor of Epigenomics AG, Berlin, without interruption since the financial year 2015.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

RESPONSIBLE AUDITOR

The auditor responsible for the audit is Andreas Weissinger.

Munich, dated March 20, 2019

Baker Tilly GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft
(Düsseldorf)

Siegfried Hund	Andreas Weissinger
German CPA	German CPA

Unaudited Consolidated Interim Financial Statements of Epigenomics AG Prepared in Accordance with IFRS as of and for the Six-Month Period Ended June 30, 2021

Consolidated Statement of Comprehensive Income (Consolidated Statement of Profit or Loss and Other Comprehensive Income)

for the period from January 1 to June 30 (unaudited)

EUR thousand	Q2 2021	Q2 2020	6M 2021	6M 2020
Revenue	**117**	**83**	**223**	**322**
Cost of sales	-26	-15	-49	-71
Gross profit	**91**	**68**	**174**	**251**
Gross margin (in %)	*77.8*	*81.9*	*78.0*	*78.0*
Other income	466	289	1,562	764
Research and development costs	-808	-1,151	-1,545	-2,754
Selling, general and administrative costs	-1,419	-1,908	-3,021	-3,901
Other expenses	-640	-654	-655	-681
Operating result/ Earnings before interest and taxes (EBIT)	**-2,310**	**-3,356**	**-3,485**	**-6,321**
Interest income	0	4	3	12
Interest expenses	-12	-14	-23	-30
Other financial result	0	-1	-16	-1
Net loss for the period before taxes on income	**-2,322**	**-3,367**	**-3,521**	**-6,340**
Taxes on income	-5	-6	-7	-14
Net loss for the period	**-2,327**	**-3,373**	**-3,528**	**-6,354**
Items that may be reclassified subsequently to profit or loss:				
Exchange rate differences from the conversion of foreign entities	183	372	-629	-22
Fair value adjustment of financial instruments measured at fair value through other comprehensive income	0	123	39	-27
Other comprehensive income for the period	**183**	**495**	**-590**	**-49**
Total comprehensive income for the period	**-2,144**	**-2,878**	**-4,118**	**-6,403**
Earnings per share (basic and diluted, in EUR)[1]	***-0.21***	***-0.57***	***-0.41***	***-1.21***

[1] Due to the capital reduction carried out in the previous year at a ratio of 8:1, the previous year's figures stated here have been adjusted where necessary for reasons of comparability

Consolidated Balance Sheet

as of June 30 (unaudited)

EUR thousand

ASSETS	June 30, 2021	Dec 31, 2020
Non-current assets		
Intangible assets	69	144
Property, plant and equipment	959	1,184
Total non-current assets	**1,028**	**1,328**
Current assets		
Inventories	242	122
Trade receivables	78	251
Marketable securities	0	961
Cash and cash equivalents	6,949	3,566
Other current assets	1,393	569
Total current assets	**8,662**	**5,469**
Total assets	**9,690**	**6,797**

EQUITY AND LIABILITIES	June 30, 2021	Dec 31, 2020
Equity		
Subscribed capital	11,823	5,891
Capital reserve	88,102	87,419
Retained earnings	-90,732	-79,046
Net loss for the period	-3,528	-11,686
Other comprehensive income	696	1,286
Total equity	**6,361**	**3,864**
Non-current liabilities		
Lease liabilities	416	460
Provisions	36	36
Total non-current liabilities	**452**	**496**
Current liabilities		
Trade payables	828	629
Lease liabilitie	161	223
Deferred income	95	80
Other liabilities	1,321	627
Provisions	472	878
Total current liabilities	**2,877**	**2,437**
Total equity and liabilities	**9,690**	**6,797**

Consolidated Cash Flow Statement

for the period from January 1 to June 30 (unaudited)

EUR thousand	6M 2021	6M 2020
Cash and cash equivalents at the beginning of the period	**3,566**	**10,155**
Operating activities		
Net loss for the period	**-3,528**	**-6,354**
Adjustments for:		
Share-based payment expenses	9	389
Amortization of intangible assets	75	99
Depreciation of property, plant and equipment	236	175
Foreign currency exchange results	-391	0
Financial income	-26	-12
Financial expenses	62	31
Taxes	7	14
Operating result before changes in operating assets and liabilities	**-3,556**	**-5,658**
Changes in operating assets and liabilities:		
* Inventories	-119	73
* Trade receivables	170	36
* Other assets	-823	212
* Non-current and current provisions	-409	349
* Trade payables and other liabilities	506	-629
* Deferred income	15	115
Tax paid	-7	-14
Cash flow from operating activities	**-4,223**	**-5,516**
Investing activities		
Payments to acquire intangible assets	0	-11
Payments to acquire property, plant and equipment	-1	-7
Payments from the sale of securities	984	0
Interest received	10	24
Cash flow from investing activities	**993**	**6**
Financing activities		
Proceeds from the issue of new shares	2,168	3,998
Payments for the issue of new shares	-54	-726
Payments from the issue of convertible bonds	5,500	0
Payments for the issue of convertible bonds	-969	0
Payments for leases	-131	-123
Cash flow from financing activities	**6,514**	**3,149**
Net cash flow	**3,284**	**-2,361**
Currency translation effects	99	15
Cash and cash equivalents at the end of the period	**6,949**	**7,809**

At the reporting date, EUR 83 thousand of cash and cash equivalents included restricted cash.

Consolidated Statement of Changes in Equity

as of June 30 (unaudited) EUR thousand	Subscribed capital	Capital reserve	Retained earnings	Net loss for the period	Other com prehensive income	**Group equity**
December 31, 2019	**43,528**	**69,251**	**-85,807**	**-17,020**	**-323**	**9,629**
Total comprehensive income	**0**	**0**	**0**	**-6,354**	**-49**	**-6,403**
Transfer of net loss for the year 2019 to retained earnings	0	0	-17,020	17,020	0	0
Costs for the creation of new shares	0	-296	0	0	0	-296
Capital increase without subscription rights	3,602	0	0	0	0	3,602
Premium from the capital increase without subscription rights	0	396	0	0	0	396
Stock option expenses	0	389	0	0	0	389
June 30, 2020	**47,130**	**69,740**	**-102,827**	**-6,354**	**-372**	**7,317**

EUR thousand	Subscribed capital	Capital reserve	Retained earnings	Net loss for the period	Other com prehensive income	**Group equity**
December 31, 2020	**5,891**	**87,419**	**-79,046**	**-11,686**	**1,286**	**3,864**
Total comprehensive income	**0**	**0**	**0**	**-3,528**	**-590**	**-4,118**
Transfer of net loss for the year 2020 to retained earnings	0	0	-11,686	11,686	0	0
Capital increase with subscription rights	1,971	0	0	0	0	1,971
Premium from the capital increase with subscription rights	0	197	0	0	0	197
Exercise of convertible bonds	3,961	-3,961	0	0	0	0
Issue of convertible bonds	0	5,500	0	0	0	5,500
Costs for the issue of convertible bonds	0	-983	0	0	0	-983
Costs for the creation of new shares	0	-79	0	0	0	-79
Stock option expenses	0	9	0	0	0	9
June 30, 2021	**11,823**	**88,102**	**-90,732**	**-3,528**	**696**	**6,361**

Notes to the Interim Consolidated Financial Statements

1 Basic Information, Principles and Methods

Corporate Information and Description of Business Activity

Epigenomics ("Epigenomics", the "Group" or the "Company") was founded as a limited liability company under German law (*Gesellschaft mit beschränkter Haftung* – GmbH) in 1998 and has its registered office in Berlin, Germany. In 2000, the Company was converted into a stock corporation under German law (*Aktiengesellschaft* – AG) and entered into the commercial register (*Handelsregister*) of Charlottenburg under HRB 75861. It has been listed in the Prime Standard segment of the Frankfurt Stock Exchange since July 19, 2004 (ticker symbol: ECX).

In accordance with its Articles of Association, the object of the Company is the development and marketing of procedures and devices for the production in quantity of particular epigenetic parameters such as DNA methylation patterns as well as the information technology bases necessary for their procurement and evaluation. Epigenomics AG is a molecular diagnostics company developing and commercializing a pipeline of proprietary products for screening, early detection and diagnosis of cancer. The Company's products will enable doctors to diagnose cancer earlier and more accurately, leading to improved outcomes for patients.

General Principles

This unaudited interim report of the Epigenomics Group comprises the condensed interim consolidated financial statements and the interim Group management report in accordance with Section 115 of the German Securities Trading Act (WpHG). The condensed consolidated interim financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB), London, and the interpretations of the International Financial Reporting Interpretations Committee (IFRIC), taking into account IAS 34 Interim Financial Reporting, which were effective as of the reporting date June 30, 2021 and which are mandatory in the European Union. The interim financial statements also comply with the German Accounting Standards (DRS) and DRS 16 Interim Financial Reporting, which were in force and applicable as of the reporting date June 30, 2021.

These condensed consolidated interim financial statements are based on the reporting period from January 1 to June 30, 2021. The Group currency is the euro (EUR).

This interim report should be read in conjunction with the annual report for the 2020 financial year, which contains a more detailed description of the Group's business activities and explanatory notes on the Group's accounting policies for the reporting period.

The Consolidated Statement of Comprehensive Income (Consolidated Statement of Profit or Loss and Other Comprehensive Income) has been prepared using the cost of sales method.

Reporting Period, Reporting Currency, and Rounding

The reporting period (comparative period) as defined in these consolidated financial statements is the period from January 1 to December 31, 2021 (2020). The reporting currency is the euro (EUR). Many figures are rounded to the nearest thousand euros, which may give rise to rounding differences in the figures presented in these notes.

Scope of Consolidation

The consolidated Group consists of Epigenomics AG as the parent company (registered office: Geneststrasse 5, 10829 Berlin, Germany) and Epigenomics, Inc., as its sole subsidiary during the reporting period. The subsidiary is registered in the U.S. state of Washington and has based its operations out of San Diego (11055 Flintkote Ave, Suite A, San Diego, CA 92121). Epigenomics AG held 100% of the share capital and the voting rights of Epigenomics, Inc. between January 1, 2020 and June 30, 2020.

Principles of Consolidation

In acquisition accounting, the carrying amount of the investment is offset against the share of equity of the subsidiary attributable to the parent as at the date of acquisition. Any resulting difference is added to the assets and liabilities in the amount in which their market value deviates from their carrying amount at the time of the initial consolidation. Any amount in excess is recognized as goodwill.

All intercompany transactions and interim results, income and expenses, profits and losses, receivables and payables are eliminated in full on consolidation.

Application of New and Revised IFRSs and Interpretations and Effects on the Company's Consolidated Financial Statements for the first six months of 2021

In the reporting year, the Group for the first time applied the following new and amended IFRSs and Interpretations issued by the IASB and endorsed by the EU that are effective for accounting periods beginning on or after January 1, 2021. Generally, the new standards and amendments mentioned below require prospective application.

Amendments to IFRS 4 *Insurance Contracts* *(endorsed by the EU on December 16, 2020)*

Concurrent to the IASB's publication of its final amendments to IFRS 17 on the accounting treatment of insurance contracts, an associated amendment was made to IFRS 4 that extended the existing option to defer initial application of IFRS 9 until the new effective date of IFRS 17.

The first-time adoption of the amendments to IFRS 4 has not yet had any significant impact on the Company's financial statements and it is not expected to have any significant impact on the Company's financial statements in the future either.

Amendments to IFRS 9, IAS 39, IFRS 7 and IFRS 16 *Interest Rate Benchmark Reform – Phase 2* *(endorsed by the EU on January 13, 2021)*

The amendments to IFRS 9, IAS 39, IFRS 7 and IFRS 16 cover practical expedients in connection with the reform of international interest rate benchmarks. These relate to hedge accounting, which does not generally have to be discontinued because of the interest rate benchmark reform. Any hedge ineffectiveness must continue to be recognized through profit or loss.

The Company does not apply hedge accounting and therefore the application of the amendments to IFRS 9, IAS 39, IFRS 7 and IFRS 16 has had no effect on its financial statements and it is not expected to have any significant impact on the Company's financial statements in the future either.

Fair value measurement

These consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at revalued amounts or their fair values at the end of each reporting period.

For determining and disclosing the fair value of financial instruments, the Company uses the following hierarchy in accordance with IFRS 13 Fair Value Measurement:

Level 1: Quoted (unadjusted) prices in active markets for identical assets or liabilities

Level 2: Inputs other than quoted prices included within level 1 that are observable for assets or liabilities, either directly (as prices) or indirectly (derived from prices)

Level 3: Inputs for assets or liabilities that are not based on observable market data (unobservable inputs)

The carrying amounts of financial assets and liabilities such as cash and cash equivalents, marketable securities, trade receivables, trade payables, convertible notes and other current liabilities approximate their fair values due to their short-term maturities. The fair value of marketable securities is based on quoted market prices (level 1). There were no transfers between level 1 and level 2 fair value measurements, and no transfers into or out of level 3 fair value measurements during the reporting period.

Currency Translation

Foreign currency exchange rates applied in the reporting period are as follows:

	Closing rates		Average rates	
	June 30, 2021	Dec 31, 2020	6M 2021	6M 2020
EUR/USD	1.1884	1.2271	1.2025	1.1033

This interim report of the Company has been reviewed by the Company's auditors.

2 Notes to the Consolidated Statement of Profit or Loss and Other Comprehensive Income

Revenue

Revenue by type:

EUR thousand

	Q2 2021	in %	Q2 2020	in %	6M 2021	in %	6M 2020	in %
Product sales (own and third party)	109	93.6	73	88,6	210	94.4	293	90,9
Licensing income	8	6.4	10	11,4	13	5.6	19	6,0
R&D income	0	0	0	0,0	0	0.0	10	3,1
Total revenue	**117**	**100,0**	**83**	**100,0**	**223**	**100,0**	**322**	**100,0**

Revenue by geographical:

EUR thousand

	Q2 2021	in %	Q2 2020	in %	6M 2021	in %	6M 2020	in %
Europe	35	30.2	38	45,5	79	35.3	135	41,9
North America	82	69.8	42	50,5	144	64.7	184	57,1
Rest oft he world	0	0.0	3	4,0	0	0.0	3	1,0
Total revenue	**117**	**100,0**	**83**	**100,0**	**223**	**100,0**	**322**	**100,0**

Other income

EUR thousand

	Q2 2021	Q2 2020	6M 2021	6M 2020
Foreign exchange rate gains	439	274	1,272	737
Income from the reversal of provisions	111	22	240	22
Correction of deferred liabilities	0	3	18	4
Recoveries and refunds	11	-10	26	0
Third-party research grants	3	0	4	0
Other	2	0	2	1
Total other income	**466**	**289**	**1,562**	**764**

Cost Allocation by Function

Q2 2021

EUR thousand

	Cost of sales	R&D costs	SG&A costs	Other expenses	Total
Materials and consumables	26	23	37	0	**86**
Depreciation and amortization	0	44	34	0	**78**
Personnel costs	0	288	682	0	**970**
Other costs	0	453	666	640	**1,759**
Total	**26**	**808**	**1,419**	**640**	**2,893**

Q2 2020

EUR thousand

	Cost of sales	R&D costs	SG&A costs	Other expenses	Total
Materials and consumables	13	67	1	0	**81**
Depreciation and amortization	0	64	72	0	**136**
Personnel costs	2	579	964	0	**1,545**
Other costs	0	441	871	654	**1,966**
Total	**15**	**1,151**	**1,908**	**654**	**3,728**

6M 2021

EUR thousand

	Cost of sales	R&D costs	SG&A costs	Other expenses	Total
Materials and consumables	49	42	65	0	**156**
Depreciation and amortization	0	105	206	0	**311**
Personnel costs	0	531	1,401	0	**1,932**
Other costs	0	867	1,349	655	**2,871**
Total	**49**	**1,545**	**3,021**	**655**	**5,270**

6M 2020

EUR thousand

	Cost of sales	R&D costs	SG&A costs	Other expenses	Total
Materials and consumables	64	289	2	0	**355**
Depreciation and amortization	0	127	146	0	**273**
Personnel costs	4	1,229	2,005	0	**3,238**
Other costs	3	1,109	1,748	681	**3,541**
Total	**71**	**2,754**	**3,901**	**681**	**7,407**

Personnel costs in Q2 2021 included share-based payment expenses of EUR 53 thousand (Q2 2020: EUR 202 thousand) and in 6M 2021 of EUR 9 thousand (6M 2020: EUR 389 thousand).

Operating result (EBIT) and EBITDA

TEUR	Q2 2021	Q2 2020	6M 2021	6M 2020
Operating result (EBIT)/ Earnings before interest and taxes	**-2,310**	**-3,356**	**-3,485**	**-6,321**
Amortization and depreciation	78	136	311	273
EBIT before amortization and depreciation (EBITDA)	**-2,232**	**-3,220**	**-3,174**	**-6,048**
Share-based payment costs	53	202	9	389
EBITDA before share-based payment costs	**-2,179**	**-3,018**	-3,165	**-5,659**

Earnings per share

The earnings per share (basic and diluted) are calculated by dividing the Group's net loss for the period by the weighted-average number of shares issued and admitted to trading in the respective period. The outstanding stock options and convertible notes issued by the Company are anti-dilutive according to IAS 33.41 and 33.43. Therefore, the earnings per share (diluted) equal the earnings per share (basic).

Due to the capital reduction carried out in the previous year at a ratio of 8:1, the previous year's figures stated here have been adjusted.

	Q2 2021	Q2 2020	6M 2021	6M 2020
Net loss for the period (in EUR thousand)	-2,327	-3,373	-3,528	-6,354
Weighted average number of shares	11,166,381	5,891,230	8,528,806	5,666,095
Earnings per share (basic and diluted, in EUR)	-0.21	-0.57	-0.41	-1.21

3 Notes to the Consolidated Balance Sheet

Non-current assets

EUR thousand	June 30, 2021	Dec 31, 2020
Software	17	51
Development costs	52	93
Total intangible assets	**69**	**144**
Fixtures/ leasehold improvements	232	254
Technical equipment	248	271
Other fixed assets	28	31
Rights of use assets resulting from leases	451	628
Total property, plant and equipment	**959**	**1,184**
Total non-current assets	**1,028**	**1,328**

Current assets

EUR thousand	June 30, 2021	Dec 31, 2020
Inventories	**242**	**122**
Trade receivables	**78**	**251**
Marketable securities	**0**	**961**
Cash and cash equivalents	**6,949**	**3,566**
Prepaid expenses	993	314
Receivables from tax authorities	299	141
Receivables from the Federal Employment Office	52	45
Claims under enforcement proceedings	28	28
Security deposit	21	20
Interest receivables	0	9
Other	0	12
Total other current assets	**1,393**	**569**
Total current assets	**8,662**	**5,469**

Equity

As of June 30, 2021, the share capital of Epigenomics AG consisted exclusively of 11,823,227 no-par value ordinary registered shares with equal rights. In 6M 2021, total equity increased by EUR 2.5 million to EUR 6.4 million at the reporting date (December 31, 2020: EUR 3.9 million).

Current liabilities

Other liailities

EUR thousand	June 30, 2021	Dec 31, 2020
Payables due to financing activities	635	0
Payables due to staff	529	430
Accrued audit fees	87	138
Payables due to tax authorities	34	33
Payables due to Supervisory Board members	0	22
Payables due to social security	4	0
Other	32	4
Total other liabilities	**1,321**	**627**

Provisions

EUR thousand	June 30, 2021	Dec 31, 2020
Payroll provisions	304	613
Provision for ongoing clinical trials	128	101
Other provisions	40	164
Total provisions	**472**	**878**

Financial instruments

EUR thousand	Measurement principle	Fair value hierarchy level	Carrying amount	Fair value	Carrying amount	Fair value
Assets			as of June 30, 2021		as of Dec 31, 2020	
Marketable securities	FVOCI	1	0	0	961	961
Cash and cash equivalents	AC		6,949	6,949	3,566	3,566

FVOCI = measured at fair value through other comprehensive income

AC = measured at amortized costs

4 Notes to the Consolidated Statement of Cash Flows

Cash consists of bank deposits and cash in hand. Cash equivalents are defined as instruments convertible to a known amount of cash on a short-term basis and carrying a very low risk of changes in value. As of the balance sheet date, the Company's cash and cash equivalents balance sheet item comprised exclusively cash. For the cash flow consolidation of the U.S. subsidiary, the operating assets and liabilities (excluding cash and cash equivalents) were translated at the average monthly exchange rates.

Cash flow from operating activities is derived indirectly from the net result for the period.

Cash flow from investing activities is calculated based on actual payments.

Cash flow from financing activities is calculated based on actual payments.

Gross proceeds from the issue of new shares in the amount of EUR 2,168 thousand in the reporting period (6M 2020: TEUR 3,998) related to the Company's capital increase from authorized capital in the second quarter of 2021.

Gross proceeds from the issue of convertible bonds in the amount of EUR 5,500 thousand in the reporting period (6M 2020: TEUR 0) related to the issue of a subordinated and non-interest bearing mandatory convertible bond from conditional capital in the first quarter of 2021.

Cash consumption

Cash flow from operating activities and cash flow from investing activities less transactions in securities is monitored by the Company as "cash consumption".

Cash consumption amounted to EUR 4.2 million in the first six months of 2021 (6M 2020: EUR 5.5 million). In the first six months of 2021, cash outflow from leases amounted to EUR 0.1 million (6M 2020: EUR 0.1 million).

5 Other information

Information on stock options

145,750 new stock options were granted in the reporting period to Executive Board members and employees of the Company. No options were exercised in the reporting period. 34,933 options expired during the reporting period. The total number of stock options still outstanding as of June 30, 2021, amounted to 401,103 with an average strike price of EUR 25.92.

This interim report was approved and cleared for publication by the Executive Board of the Company on August 10, 2021.

Berlin, August 10, 2021

The Executive Board (*Vorstand*)

Audited Financial Statements of Epigenomics AG Prepared in Accordance with HGB as of and for the Financial Year Ended December 31, 2020

Balance Sheet of Epigenomics AG (HGB) as of December 31, 2020

The balance sheet of Epigenomics AG is structured in accordance with section 266 of the German Commercial Code (*Handelsgesetzbuch* – HGB).

ASSETS	Dec. 31, 2020 EUR	Dec. 31, 2019 (EUR thousand)	EQUITY AND LIABILITIES	Dec. 31, 2020 EUR	Dec. 31, 2019 (EUR thousand)
A. FIXED ASSETS	**1,365,028.28**	**1,528**	**A. EQUITY**	**9,554,304.79**	**25,543**
I. Intangible fixed assets	**48,316.47**	**121**	I. Subscribed capital	**5,891,230.00**	**43,528**
1. Purchased concessions, industrial and similar rights and assets, licenses in such rights and assets	48,316.47	121	*Conditional capital:*	*23,564,923.00*	*17,990*
			II. Capital reserve	**71,458,518.47**	**53,604**
			III. Accumulated losses brought forward	**-67,795,443.68**	**-71,589**
II. Tangible fixed assets	**529,711.81**	**620**			
1. Leasehold improvements	254,037.11	298	**B. PROVISIONS**	**1,048,841.06**	**1,041**
2. Technical equipment and machinery	254,254.50	295			
3. Other equipment, operating and office equipment	21,420.20	27	1. Provisions for personnel expenses	623,088.19	206
III. Long-term financial assets	**787,000.00**	**787**	2. Other provisions	425,752.87	835
1. Shares in affiliated companies	787,000.00	787	*-theroef long-term*	*30,308.85*	36
B. CURRENT ASSETS	**9,679,081.86**	**26,367**	**C. LIABILITIES**	**526,485.67**	**1,499**
I. Inventories	**98,068.48**	**178**	1. Advanced payments received	7,840.00	*46*
1. Raw materials, consumables and supplies	42,108.89	42	2. Trade payables	458,895.06	880
2. Work in progress	18,632.00	47	3. Other liabilities	59,750.61	573
3. Finished goods	37,327.59	89			
			D. DEFERRED INCOME	**71,677.90**	**5**
II. Receivables and other assets	**5,301,170.21**	**15,751**			
1. Trade receivables	65,121.97	59			
2. Receivables from affiliated companies	5,000,000.00	15,294			
3. Other assets	236,048.24	398			
III. Securities	**961,000.00**	**880**			
1. Other securities	961,000.00	880			
IV. Cash-in-hand and bank balances	**3,318,843.17**	**9,558**			
C. PREPAID EXPENSES	**157,199.28**	**193**			
TOTAL ASSETS	**11,201,309.42**	**28,088**	**TOTAL EQUITY AND LIABILITIES**	**11,201,309.42**	**28,088**

Income Statement of Epigenomics AG (HGB) for 2020

The income statement of Epigenomics AG is structured in accordance with section 275 (2) of the German Commercial Code (Handelsgesetzbuch – HGB).

	2020 EUR	2019 EUR thousand
Gross revenue	**2,784,698.28**	**4,876**
1. Sales	**1,035,815.51**	**1,523**
2. Increase (previous year: decrease) in stock of finished goods and work in progress	**-79,903.95**	**9**
3. Other operating income	**1,828,786.72**	**3,344**
of which currency translation gains	*1,357,919.08*	*2,184*
4. Cost of materials	**-300,878.87**	**-974**
a) Cost of raw materials, consumables and supplies	-297,899.34	-962
b) Cost of purchased services	-2,979.53	-12
5. Personnel expenses	**-2,791,116.51**	**-3,661**
a) Wages and salaries	-2,462,766.72	-3,242
b) Social security	-328,349.79	-419
6. Depreciation, amortization and write-downs	**-12,186,777.26**	**-182**
a) of intangible and tangible fixed assets	-171,151.79	-182
b) of current assets	-12,015,625.47	0
7. Other operating expenses	**-7,513,491.20**	**-9,933**
of which currency translation losses	*-2,871,346.67*	-1,758
8. Other interest and similar income	**20,825.78**	**172**
9. Interest and similar expenses	**-0.46**	**0**
10. Net loss for the year	**-19,986,740.24**	**-9,702**
11. Loss carryforward	**-71,588,874.84**	**-61,887**
12. Income from the reduction of share capital	**41,238,610.00**	**0**
13. Income from the cancellation of shares	**6.00**	**0**
14. Allocation to the capital reserve in accordance with the provisions on the ordinary reduction of share capital	**-17,458,438.60**	**0**
15. Allocation to the capital reserve in accordance with the provisions on the simplified reduction of share capital	**-6.00**	**0**
16. Accumulated losses brought forward	**-67,795,443.68**	**-71,589**

Notes to the annual financial statements as of December 31, 2020

1. General information on the annual financial statements

Epigenomics AG, Geneststr. 5, 10829 Berlin, Germany, has its registered office in Berlin and is entered into the commercial register (*Handelsregister*) of the Local Court (*Amtsgericht*) of Berlin under HRB 75861.

The Company's fiscal year corresponds to the calendar year and covered the period from January 1 to December 31, 2020. The prior-year disclosures relate to the period from January 1 to December 31, 2019.

These annual financial statements have been prepared on the basis of the accounting and measurement requirements of the German Commercial Code (*Handelsgesetzbuch* – HGB), as amended by the German Accounting Directive Implementation Act (*Bilanzrichtlinie-Umsetzungsgesetz* – BilRUG), the supplementary requirements of the German Stock Corporation Act (*Aktiengesetz* – AktG), and the Articles of Association.

The "going concern" principle pursuant to section 252 (1) no. 2 HGB was applied. The Company had liquid funds (cash, cash equivalents and marketable securities) of EUR 4.3 million as of the end of 2020. After the end of the reporting period, in January 2021, the Company successfully placed a EUR 5.5 million mandatory convertible bond with its shareholders. After receiving the gross proceeds, the Company's liquidity amounted to well in excess of EUR 9 million as of the beginning of February 2021. The first cost-cutting measures were also introduced at that time. According to internal projections, the Company's continued existence as a going concern is secured beyond the beginning of the second quarter of 2022, although it must subsequently be considered at risk, at the latest by the end of the first quarter of 2022 (material uncertainty), unless the negative coverage decision issued by the U.S. Centers for Medicare and Medicaid Services (CMS) in January 2021 can be successfully appealed or rescinded in the coming months. The Company is currently evaluating its legal options. However, the chances of this succeeding must be regarded as slim at best, and as such various strategic alternatives are also being examined to secure the Company's continued existence. Building on its expertise in blood testing and DNA methylation biomarkers, Epigenomics AG has already developed and validated a new test for CRC screening with clinical performance that meets the new coverage criteria laid down by CMS. Based on our experience in recent years and given the considerable market potential of this new test, we anticipate being able to find one or more solid partners in 2021 who share our opinion and are prepared to make sufficient capital available to leverage its potential.

The Company is a large corporation within the meaning of section 267 (3) sentence 2 HGB since its shares have been listed in the Prime Standard segment of the Frankfurt Stock Exchange since July 19, 2004 (ticker symbol: ECX). Due to the reverse stock split conducted in November, its shares are now traded under new securities identification number (WKN) A3H218 and ISIN DE000A3H2184.

2. Accounting policies

The accounting policies applied in preparin g these annual financial statements were unchanged as against the previous year. The balance sheet classification complies with section 266 (2) and (3) HGB.

Please note the following regarding the measurement of individual items of assets and liabilities:

Fixed assets were subject to an inventory in the reporting period. In the interests of clear and comprehensible presentation, "leasehold improvements" are reported under tangible fixed assets in accordance with section 265 (6) HGB.

Intangible assets comprise purchased software licenses (e.g., for databases) and purchased licenses to third-party patents. They are carried at cost and amortized over their useful lives (3–20 years) using the straight-line method. Write-downs are recognized where required. The useful lives of licenses and third-party patents are determined by the duration of the underlying intellectual property rights or the term of the license agreement, up to a maximum of 20 years. The useful life commences at the priority or filing date. The option to capitalize development costs was not exercised.

Tangible fixed assets are carried at cost less depreciation. Borrowing costs are not included. Tangible fixed assets are depreciated using the straight-line method, applying a useful life of between 5 and 10 years depending on the asset class. Leasehold improvements are depreciated over a maximum of 12 years based on the remaining term of the underlying lease and any extension options.

Tangible fixed assets are broken down into leasehold improvements, technical equipment and machinery, and other equipment, operating and office equipment. Technical equipment comprises laboratory fitti ngs, measuring, test and analysis instruments, production equipment, and all IT.

In accordance with tax law, low-value assets are written off in full in the year in which they are acquired and are treated as disposals in the statement of changes in fixed assets.

Investment grants and subsidies received in prior periods were offset directly against the subsidized asset as a retrospective reduction in acquisition costs. The grants and subsidies are amortized through profit or loss as a reduction in the corresponding depreciation expense.

Long-term financial assets are carried at the lower of cost or fair value as of the reporting date. The equity investment in a subsidiary is reported under long-term financial assets.

Write-downs are recognized on intangible assets, tangible fixed assets and long-term financial assets if the impairment is expected to be permanent. Write-downs are reversed up to a maximum of amortized cost if the reasons for impairment no longer apply.

Raw materials, consumables and supplies are carried at cost. Write-downs are recognized as necessary pursuant to the strict principle of lower of cost or market value.

Work in progress and finished goods are carried at cost, taking into account the strict principle of lower of cost or market value. Cost includes direct materials and production costs, overheads for materials and production, and depreciation attributable to production. It does not include borrowing costs.

Receivables and other assets are carried at cost, taking into account the strict principle of lower of cost or market value. Adequate specific valuation allowances are recognized to take account of risk exposures.

Other securities classified as current assets are carried at the lower of cost or market or fair value. Write-downs are reversed up to a maximum of amortized cost if the reasons for impairment no longer apply.

Cash and cash equivalents are carried at their principal amount.

Prepaid expenses are recognized for payments made in advance that represent an expense for future periods.

Deferred tax assets and liabilities are offset. Excess deferred tax assets are not recognized, in line with the option under section 274 (1) sentence 2 HGB.

Provisions for personnel expenses and **other provisions** cover all obligations and identifiable risks in the required settlement amount dictated by prudent business judgment. Other provisions with a remaining maturity of more than one year are discounted at the average market interest rate for the past seven fiscal years corresponding to their remaining maturity.

On initial recognition, provisions are carried at the required settlement amount of the obligation dictated by prudent business judgment (i.e., after discounting), without recognizing interest income (net method). In subsequent periods, discounting of provisions is recognized in the financial result.

Liabilities are carried at their settlement amount. If the settlement amount exceeds the issue amount, the difference is recognized as an asset and amortized over the term of the liability.

Deferred income comprises payments received prior to the reporting date that represent income for a specific period after that date.

Assets and liabilities denominated in foreign currency with a remaining term of less than one year are measured at the middle spot rate prevailing on the balance sheet date, irrespective of the principles of realization or imparity or historical cost. Currency translation gains or losses are recognized in the income statement.

The official euro foreign exchange reference rates published daily by the European Central Bank are used as closing rates for all currency translation. These can be found online at www.ecb.eu.

The **income statement** was prepared using the total cost (nature of expense) method pursuant to section 275 (2) HGB.

If products are sold with a right of return, the **sales** are only recognized in their full amount after the right of return has expired. Until that date, the sales are recognized at cost less any return costs. No products were sold with a right of return in the reporting period.

3. Balance sheet disclosures

3.1. Fixed assets

Changes in the individual items of fixed assets and the depreciation, amortization and write-downs during the fiscal year are presented in the statement of changes in fixed assets (see Appendix 3/1).

3.2. Shareholdings

Shares in affiliated companies were as follo ws as of the end of the reporting period:

Company	Registered office	Equity interest in %	Net loss not covered by equity as of Dec. 31, 2020 in EUR thousand	Net profit/loss for 2020 in EUR thousand
Epigenomics, Inc.	Seattle, WA (USA)	100.0%	17,067	-3,246

3.3. Trade receivables

All trade receivables are due within one year. There were no indications that individual receivables were impaired as of the reporting date.

3.4. Receivables from affiliated companies

As of December 31, 2020, the Company reported EUR 5,000 thousand in receivables from affiliated company Epigenomics, Inc. All receivables are due within one year. In the reporting year, receivables from the subsidiary in the amount of EUR 12,016 thousand were impaired. This was mainly due to the negative reimbursement decision of the U.S. Centers for Medicare and Medicaid Services (CMS) for Epi proColon. A remaining receivable amount of EUR 5.0 million has not yet been impaired and it is being examined whether this receivable can be converted into a long-term loan to the subsidiary.

3.5. Other assets

All other assets mature within one year.

3.6. Cash and cash equivalents

3.6.1. Restrictions on disposal

As of the balance sheet date, bank deposits amounting to EUR 24 thousand were subject to restrictions on disposal due to a lease guarantee.

3.6.2. Other securities

As of the balance sheet date, a marketable bond without fixed maturity was reported under other securities. Under the Company's investment policy, certain criteria are observed when investing in securities. These include restricting investments to eurodenominated assets and ensuring that the issuer or securities have a capital market rating equivalent to investment grade. At present, the Company only holds trust-preferred securities issued by a subsidiary of Deutsche Bank AG. During the reporting period, the securities were subject to a fair value adjustment of EUR 81 thousand to reflect their listed price as of the reporting date.

3.7. Equity

3.7.1. Disclosures on share classes (section 160 (1) no. 3 AktG)

As of December 31, 2020, the share capital of Epigenomics AG consisted exclusively of ordinary registered shares with non-par value, each such share representing a notional amount of the issued share capital of EUR 1.00. The reverse stock split approved by the extraordinary General Shareholders' Meeting on November 27, 2020 was carried out on the Company's shares in a ratio of 8:1 on December 2, 2020. As a result, eight old Epigenomics shares (securities identification number: A11QW5) were combined to form one new Epigenomics share (securities identification number: A3H218). This reduced the share capital from EUR 47,129,846 to EUR 5,891,230, composed of 5,891,230 non-par value ordinary registered shares. The entry was made in the commercial register on December 2, 2020. The table below shows the Company's equity structure on December 31:

	EUR as of Dec. 31, 2019	***EUR as of Dec. 31, 2020***
Share capital	**43,527,692**	**5,891,230**
Conditional capital	**17,989,705**	**23,564,923**
** Conditional Capital IX*	*521,095*	*0*
** Conditional Capital X*	*14,468,610*	*0*
** Conditional Capital XI*	*1,000,000*	*1,000,000*
** Conditional Capital XII*	*1,000,000*	*1,000,000*
** Conditional Capital XIII*	*1,000,000*	*1,000,000*
** Conditional Capital XIV*	*0*	*20,564,923*
Authorized Capital	**10,504,618**	***23,564,923***
** Authorized Capital 2019/I*	*3,602,154*	*0*
** Authorized Capital 2019/II*	*6,902,464*	*0*
** Authorized Capital 2020/I*	*0*	*4,712,984*
** Authorized Capital 2020/II*	*0*	*18,851,939*

3.7.2. Disclosures on conditional capital

3.7.2.1. Conditional Capital IX and Conditional Capital X

By a resolution of the Annual General Shareholders' Meeting of the Company dated June 12, 2020, Conditional Capital IX and Conditional Capital X were revoked. The amendment to Conditional Capital IX and Conditional Capital X and the associated amendment of the Articles of Association were entered into the commercial register on July 7, 2020.

3.7.2.2. Conditional Capital XI

The General Shareholders' Meeting on May 25, 2016 resolved Conditional Capital XI with the corresponding addition of Article 5 (9) of the Articles of Association. The share capital was thus conditionally increased by up to EUR 1,000,000 by means of issuing up to 1,000,000 new non-par value registered shares. The conditional capital increase serves to grant or issue shares to members of the Executive Board of the Company, to members of the management of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG and to employees of the Company and of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG who exercise the subscription rights they were granted prior to the end of April 30, 2018 pursuant to the authorization resolution of the General Shareholders' Meeting dated May 25, 2016 (Stock Option Program 16–18). The new shares are issued against payment by the beneficiary to the Company of the respective exercise price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is to be implemented only if subscription rights are issued in accordance with the authorization resolution on the Company's Stock Option Program 16–18 by the General Shareholders' Meeting dated May 25, 2016 and only to the extent that the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares issued carry dividend rights from the beginning of the fiscal year in which they are created. The Executive Board is authorized, as far as legally permissible and with the consent of the Supervisory Board, to determine that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall carry dividend rights from the beginning of the fiscal year immediately preceding the year of issue.

Between 2016 and 2018 the maximum permitted number of share options were issued based on Conditional Capital XI. In accordance with the terms and conditions of the stock option program, since October 2020 it has been possible to create new shares upon exercise of these stock options. However, no option rights have been exercised under this program to date.

3.7.2.3. Conditional Capital XII

The General Shareholders' Meeting on May 30, 2017 resolved Conditional Capital XII with the corresponding addition of Article 5 (10) of the Articles of Association. The share capital was thus conditionally increased by up to EUR 1,000,000 by means of issuing up to 1,000,000 new non-par value registered shares. The conditional capital increase serves to grant or issue shares to members of the Executive Board of the Company, to members of the management of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG and to employees of the Company and of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG who exercise the subscription rights they were granted prior to the end of May 31, 2019 pursuant to the authorization resolution of the General Shareholders' Meeting dated May 30, 2017 (Stock Option Program 17–19). The new shares are issued against payment by the beneficiary to the Company of the respective exercise price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is to be implemented only if subscription rights are issued in accordance with the authorization resolution on the Company's Stock Option Program 17–19 by the General Shareholders' Meeting dated May 30, 2017 and only to the extent that the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares issued carry dividend rights from the beginning of the fiscal year in which they are created. The Executive Board is authorized, as far as legally permissible and with the consent of the Supervisory Board, to determine that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall carry dividend rights from the beginning of the fiscal year immediately preceding the year of issue.

Between 2017 and 2019 the maximum permitted number of share options were issued based on Conditional Capital XII. In accordance with the terms and conditions of the stock option program, no new shares can be created upon exercise of these stock options before April 2022.

3.7.2.4. Conditional Capital XIII

The General Shareholders' Meeting on May 15, 2019 resolved Conditional Capital XIII with the corresponding addition of Article 5 (11) of the Articles of Association. The share capital was thus conditionally increased by up to EUR 1,000,000 by means of issuing up to 1,000,000 new non-par value registered shares. The conditional capital increase serves to grant or issue shares to members of the Executive Board of the Company, to members of the management of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG and to employees of the Company and of domestic and foreign dependent companies of the Company as defined in sections 15 and 17 AktG who exercise the subscription rights they were granted prior to the end of May 31, 2021 pursuant to the authorization resolution of the General Shareholders' Meeting dated May 15, 2019 (Stock Option Program 19–21). The new shares are issued against payment by the beneficiary to the Company of the respective exercise price to be determined in accordance with the aforementioned authorization resolution.

The conditional capital increase is to be implemented only if subscription rights are issued in accordance with the authorization resolution on the Company's Stock Option Program 19–21 by the General Shareholders' Meeting dated May 15, 2019 and only to the extent that the holders of these subscription rights exercise them and the Company does not grant any treasury shares or cash compensation to fulfill these subscription rights.

The new shares issued carry dividend rights from the beginning of the fiscal year in which they are created. The Executive Board is authorized, as far as legally permissible and with the consent of the Supervisory Board, to determine that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall carry dividend rights from the beginning of the fiscal year immediately preceding the year of issue. If the new shares are issued to members of the Executive Board, the Supervisory Board is authorized to do so. The Supervisory Board is also authorized to determine the further details concerning the implementation of the conditional capital increase where the granting of subscription rights to members of the Executive Board is concerned. In all other cases, the Executive Board is authorized to determine such details.

As of the balance sheet date, 62,803 stock options had been granted on the basis of Conditional Capital XIII. In accordance with the terms and conditions of the stock option program, no new shares can be created upon exercise of these stock options before April 2024.

3.7.2.5. Conditional Capital XIV

The General Shareholders' Meeting on June 12, 2020 resolved Conditional Capital XIV with the corresponding addition of Article 5 (6) of the Articles of Association. The share capital was thus conditionally increased by up to EUR 20,564,923.00 by means of issuing up to 20,564,923 new non-par value registered shares. The conditional capital increase serves to grant shares to the holders or creditors of bonds or participation rights, such shares being issued by the Company, or a Group company within the meaning of section 18 AktG in which the Company directly and/or indirectly holds an interest of at least 90%, until June 11, 2025 on the basis of the authorization resolution of the General Shareholders' Meeting dated June 12, 2020, or issued by the Company until March 31, 2021 on the basis of the authorization resolution of the General Shareholders' Meeting dated November 27, 2020, if option or conversion rights are exercised, if option or conversion obligations are performed or if the Company exercises its optional right to deliver shares of the Company instead of payment of the cash amount due (or parts thereof). The new shares are issued at the respective option or conversion price to be determined in accordance with the authorization resolution of the General Shareholders' Meeting dated June 12, 2020 or the authorization resolution of the General Shareholders' Meeting dated November 27, 2020.

The conditional capital increase is only

(1) to be implemented if bonds or participation rights are issued in accordance with the authorization resolution of the General Shareholders' Meeting dated June 12, 2020, and only to the extent that

- option or conversion rights are exercised or

- holders or creditors of bonds or part icipation rights who are under an obligation to exercise an option or under a conversion obligation perform their obligation to exercise the option or their conversion obligation or
- the Company exercises its optional right to deliver shares of the Company instead of paying the cash amount due (or parts thereof),

or

(2) to be implemented if bonds are issued in accordance with the authorization resolution of the General Shareholders' Meeting dated November 27, 2020, and only to the extent that

- conversion rights are exercised or
- holders or creditors of bonds who are under a conversion obligation perform their conversion obligation

and to the extent that no cash settlement is granted and no shares from an authorized capital, treasury shares or shares of another listed company are delivered. The new shares issued carry dividend rights from the beginning of the fiscal year in which they are issued. The Executive Board is authorized, as far as legally permissible and with the consent of the Supervisory Board, to determine that, if no resolution on the appropriation of net profit for the fiscal year immediately preceding the year of issue of the new shares has been adopted when the new shares are issued, the new shares shall carry dividend rights from the beginning of the fiscal year immediately preceding the year of issue. The Executive Board is also authorized, with the consent of the Supervisory Board, to determine the further details concerning the implementation of the conditional capital increase.

The amendment to Conditional Capital XIV and the associated amendment of the Articles of Association were entered into the commercial register on December 2, 2020.

3.7.3. Disclosures on authorized capital (section 160 (1) no. 4 AktG)

3.7.3.1. Authorized Capital 2020/I (Authorized Capital 2019/I)

In March 2020, the Company's Executive Board used Authorized Capital 2019/I to increase share capital, with the consent of the Supervisory Board, by issuing 3,602,154 new non-par value registered shares. The new shares were issued as part of a private placement. The capital increase was entered in the commercial register on April 2, 2020.

On the basis of Authorized Capital 2020/I, the Executive Board is authorized until June 11, 2025, to increase, with the consent of the Supervisory Board, the share capital of the Company once or several times by up to a total of EUR 4,712,984.00 against cash and/or in-kind contributions by issuing new nonpar value registered shares. Subscription rights shall be granted to the shareholders. The Executive Board is, however, authorized to exclude, with the consent of the Supervisory Board, the shareholders' statutory subscription rights in certain events. The entry was made in the commercial register on July 7, 2020.

3.7.3.2. Authorized Capital 2020/II (Authorized Capital 2019/II)

Authorized Capital 2019/II, which had been partly utilized in 2019 in the context of a rights issue and consequently amounted to up to EUR 6,902,464.00, was revoked at the Annual General Shareholders' Meeting on June 12, 2020 and replaced with the new Authorized Capital 2020/II.

On the basis of Authorized Capital 2020/II, the Executive Board is authorized until June 11, 2025, to increase, with the consent of the Supervisory Board, the share capital of the Company once or several times by up to a total of EUR 18,851,939 against cash and/or in-kind contributions by issuing new nonpar value registered shares. Subscription rights shall be granted to the shareholders. The Executive Board is, however, authorized to exclude, with the consent of the Supervisory Board, the shareholders' statutory subscription rights for fractional am ounts. The entry was made in the commercial register on July 7, 2020.

3.7.4. Capital increase and capital reduction

As of December 31, 2020, the Company's share capital was composed of 5,891,230 non-par value registered shares, constituting a decrease of 37,636,462 shares issued compared with the total of 43,527,692 as of December 31, 2019.

As part of the capital increase referred to in section 3.7.3.1, 3,602,154 new non-par value registered shares of the Company were successfully placed against cash contributions by means of a private placement in March 2020. The new shares were placed at an issue price of EUR 1.11. The capital increase was entered into the commercial register of Charlottenburg on April 2, 2020.

By resolution of the extraordinary General Shareholders' Meeting dated November 27, 2020, a capital reduction was carried out in the reporting period by means of a reverse stock split, with the shares consolidated at a ratio of 8:1. The share capital was reduced in accordance with the rules for an ordinary capital reduction pursuant to sections 222 *et seq.* AktG. To ensure an equal reduction ratio, the first step was to reduce the share capital of EUR 47,129,846.00 by EUR 6.00 pursuant to the simplified procedure under section 237 (3) no. 1, (4) and (5) AktG and to transfer that amount to the capital reserves. The remaining share capital of EUR 47,129,840.00, composed of 47,129,840 non-par value ordinary registered shares, was reduced by EUR 41,238,610.00 to EUR 5,891,230.00. The amount of EUR 23,780,171.40 freed up was used to cover losses and EUR 17,458,438.60 was transferred to the capital reserves. The capital reduction was entered in the commercial register after the end of the reporting period, on January22, 2021.

3.7.5. Capital reserves

The capital reserves changed as follows in the reporting period:

EUR	2019	2020
Balance as of January 1	52,778,160.21	53,603,836.93
Creation of new shares against cash contributions	825,676.72	396,236.94
Transfer to capital reserves pursuant to rules on ordinary capital reduction	0.00	17,458,438.60
Transfer to capital reserves pursuant to rules on simplified capital reduction	0.00	6.00
Balance as of December 31	53,603,836.93	71,458,518.47

3.7.6. Disclosures on subscription rights (section 160 (1) no. 5 AktG)

3.7.6.1. Current stock option programs[1]

The Company had the following stock option programs in place as of the balance sheet date.

Both the 09–13 and 11–15 programs have expired. Stock options can no longer be granted from these programs or from the 16–17 and 17–19 programs.

With the consent of the General Shareholders' Meeting on May 25, 2016, the Company launched Stock Option Program 16–18 in 2016. The Company's Executive Board and Supervisory Board were authorized, until the end of April 30, 2018, to issue up to 125,000 subscription rights to beneficiaries.

The beneficiaries of the new rights are the members of the Company's Executive Board (25%), Company employees (35%), members of the management of subordinated Group companies (7%), and employees of subordinated Group companies (33%). The shareholders have no subscription rights.

The exercise price equals the non-volume weighted average stock exchange closing price of the shares of the Company on the ten stock exchange trading days preceding the issue date of the tranche in the electronic trading system of the Frankfurt Stock Exchange, plus 10%.Subscription rights under each tranche have a term of seven years and can only be exercised after they have vested and after a waiting period of four years following issue of the subscription rights.

After the waiting period has expired, the vested subscription rights under a tranche may only be exercised if the closing stock exchange price of the shares of the Company in the electronic trading system of the Frankfurt Stock Exchange has exceeded the original price by at least 10% on at least one trading day in the period between the issue date of the subscription rights under this tranche and the expiration of the waiting period

[1] With respect to the stock option programs, all figures, share prices and values are based on the Company's capital structure after the capital reduction in December 2020. For reasons of comparability, the applicable figures for 2019 have been adjusted. No adjustment was made in respect of the phantom stock programs since all programs had expired as of the end of the reporting period.

(performance target). If the performance target has not been reached upon expiration of the waiting period, the subscription rights shall expire without compensation.

Any subscription rights of a beneficiary that have not yet vested shall expire without compensation upon termination of the service or employment contract between the beneficiary and the Company (or a subordinated Group company) if the service or employment contract has been terminated by the beneficiary, or by the Company (or the respective subordinated Group company) for cause. This shall not apply to any termination of a member of the Executive Board or a member of the management of subordinated Group companies on account of a vote of no confidence by the General Shareholders' Meeting.

Subscription rights of a beneficiary that have vested but have not yet been exercised or could not yet be exercised by the respective beneficiary shall expire without compensation upon termination of the service or employment contract between the beneficiary and the Company (or a subordinated Group company) if the service or employment contract has been terminated by the Company (or the respective subordinated Group company) for cause. This shall not apply to any termination of a member of the Executive Board or a member of the management of subordinated Group companies on account of a vote of no confidence by the General Shareholders' Meeting.

The subscription rights granted to beneficiaries under this Stock Option Program 16–18 are inheritable but are non-transferable and may not be sold or pledged. Subscription rights that are not or cannot be exercised by the end of the term expire without compensation.

No stock options were issued from Stock Option Program 16–18 in the reporting period (2019: 0).

With the consent of the General Shareholders' Meeting on May 30, 2017, the Company launched Stock Option Program 17-19 in 2017. The Company's Executive Board and Supervisory Board were authorized, until the end of May 31, 2019, to issue up to 125,000 subscription rights to beneficiaries.

The beneficiaries are the members of the Executive Board of the Company and members of the management of subordinated Group companies (68%) and the employees of the Company and of subordinated Group companies (32%). The shareholders have no subscription rights.

The exercise price equals the non-volume weighted average stock exchange closing price of the shares of the Company on the ten stock exchange trading days preceding the issue date of the tranche in the electronic trading system of the Frankfurt Stock Exchange, plus 10%.

Subscription rights under each tranche have a term of seven years and can only be exercised after they have vested and after a waiting period of four years following issue of the subscription rights.

After the waiting period has expired, the vested subscription rights under a tranche may only be exercised if the closing stock exchange price of the shares of the Company in the

electronic trading system of the Frankfurt Stock Exchange has exceeded the original price by at least 10% on at least one trading day in the period between the issue date of the subscription rights under this tranche and the expiration of the waiting period (performance target). If the performance target has not been reached upon expiration of the waiting period, the subscription rights shall expire without compensation.

Any subscription rights of a beneficiary that have not yet vested shall expire without compensation upon termination of the service or employment contract between the beneficiary and the Company (or a subordinated Group company) if the service or employment contract has been terminated by the beneficiary, or by the Company (or the respective subordinated Group company) for cause. This shall not apply to any termination of a member of the Executive Board on account of a vote of no confidence by the General Shareholders' Meeting.

Subscription rights of a beneficiary that have vested but have not yet been exercised or could not yet be exercised by the respective beneficiary shall expire without compensation upon termination of the service or employment contract between the beneficiary and the Company (or a subordinated Group company) if the service or employment contract has been terminated by the Company (or the respective subordinated Group company) for cause. This shall not apply to any termination of a member of the Executive Board on account of a vote of no confidence by the General Shareholders' Meeting.

The subscription rights granted to beneficiaries under this Stock Option Program 17–19 are inheritable but are non-transferable and may not be sold or pledged. Subscription rights that are not or cannot be exercised by the end of the term expire without compensation.

No stock options were issued from Stock Option Program 17-19 in the reporting period (2019: 611,170).

With the consent of the General Shareholders' Meeting on May 15, 2019, the Company launched Stock Option Program 19-21 in 2019. The Company's Executive Board and Supervisory Board were authorized, until the end of May 31, 2021, to issue up to 125,000 subscription rights to beneficiaries.

The beneficiaries are the members of the Executive Board of the Company and members of the management of subordinated Group companies (68%) and the employees of the Company and of subordinated Group companies (32%). The shareholders have no subscription rights.

The exercise price equals the non-volume weighted average stock exchange closing price of the shares of the Company on the ten stock exchange trading days preceding the issue date of the tranche in the electronic trading system of the Frankfurt Stock Exchange, plus 10%.

Subscription rights under each tranche have a term of seven years and can only be exercised after they have vested and after a waiting period of four years following issue of the subscription rights.

After the waiting period has expired, the vested subscription rights under a tranche may only be exercised if the closing stock exchange price of the shares of the Company in the electronic trading system of the Frankfurt Stock Exchange has exceeded the original price by at least 10% on at least one trading day in the period between the issue date of the subscription rights under this tranche and the expiration of the waiting period (performance target). If the performance target has not been reached upon expiration of the waiting period, the subscription rights shall expire without compensation.

Any subscription rights of a beneficiary that have not yet vested shall expire without compensation upon termination of the service or employment contract between the beneficiary and the Company (or a subordinated Group company) if the service or employment contract has been terminated by the beneficiary, or by the Company (or the respective subordinated Group company) for cause. This shall not apply to any termination of a member of the Executive Board on account of a vote of no confidence by the General Shareholders' Meeting.

The subscription rights granted to beneficiaries under this Stock Option Program 19–21 are inheritable but are non-transferable and may not be sold or pledged. Subscription rights that are not or cannot be exercised by the end of the term expire without compensation.

67,728 rights were issued from Stock Option Program 19–21 in the reporting period (2019: 0). Under the terms of the program, no new shares may be created under exercise of the option rights before April 2024.

The award of stock options to employees is not recognized in the accounts, since for accounting purposes no payment is received for these options and thus there is no need to make additions to the capital reserve or recognize an expense.

3.7.6.2. Issued stock options

The following tables detail the changes in the outstanding stock options during the reporting period:

Stock option program 16–18	options outstanding as of Dec. 31, 2019	options issued in 2020	options forfeited in 2020	options outstanding as of Dec. 31, 2020
Option holder				
Greg Hamilton (CEO)	28,436	0	0	28,436
Jorge Garces (COO)	0	0	0	0
Albert Weber (EVP Finance)	3,750	0	0	3,750
Other holders	80,021	0	2,578	77,443
of which employees of the subsidiary	*41,826*	*0*	*2,500*	*39,326*
Total options	**112,207**	**0**	**2,578**	**109,629**
Average exercise price in EUR	**38.77**	**n/a**	**33.20**	**38.90**

Stock option program 17-19	options outstanding as of Dec. 31, 2019	options issued in 2020	options forfeited in 2020	options outstanding as of Dec. 31, 2020
Option holder				
Greg Hamilton (CEO)	20,509	0	0	20,509
Jorge Garces (COO)	21,250	0	0	21,250
Albert Weber (EVP Finance)	17,500	0	0	17,500
Other holders	62,722	0	4,127	58,595
of which employees of the subsidiary	*37,889*	*0*	*3,556*	*34,333*
Total options	**121,981**	**0**	**4,127**	**117,854**
Average exercise price in EUR	**23.00**	**n/a**	**16.03**	**23.25**

Stock option program 19-21	options outstanding as of Dec. 31, 2019	options issued in 2020	options forfeited in 2020	options outstanding as of Dec. 31, 2020
Option holder				
Greg Hamilton (CEO)	0	12,500	0	12,500
Jorge Garces (COO)	0	10,625	0	10,625
Albert Weber (EVP Finance)	0	8,750	0	8,750
Other holders	0	35,853	4,925	30,928
of which employees of the subsidiary	*0*	*18,125*	*4,375*	*13,750*
Total options	**0**	**67,728**	**4,925**	**62,803**
Average exercise price in EUR	**n/a**	**20.00**	**20.00**	**20.00**

In the reporting period, no rights were exercised under any of the three option programs presented, and none expired. Contractual commitments to a total of 55,000 further rights were made to members of the Executive Board and contractual commitments to 4,375 further rights were made to other option holders for award to them in 2021, provided they are available from the SOPs active at that time.

3.8. Measurement and accounting of other share-based payment plans

In prior years, the Company established four phantom stock programs (PSPs) as incentive schemes for management and staff. The intention was to grant "phantom stock rights" (PSRs) to beneficiaries under these programs: PSP 03–15, PSP 2013, PSP 2014 and PSP 2015. The programs define a PSR asa conditional claim of its holder against the Company for the future payment of a premium to the holder. More detailed information on the structure of these plans can be found in the management report for 2020.

The PSPs are cash-settled remuneration plans. When the rights are exercised, the Company is required to pay the option premiums to rights holders in cash. Issuing PSRs necessitates the recognition of personnel expenses amounting to the fair value of the rights, for which provisions must be recognized. An external service provider appointed by the Company calculates the fair value of the outstanding rights using the binomial approach based on the Cox-Ross-Rubinstein model.

No rights under the Company's PSPs were issued in the reporting year or in the previous year.

The rights under the PSP 03–15, PSP 2013 and PSP 2014 programs expired in 2019. The programs are thereby terminated.

Phantom stock program 2015 (PSP 2015)	issued PSR as of Dec 31, 2019	forfeited PSR in 2020	issued PSR as o Dec 31, 2020
Right holders			
Albert Weber (EVP Finance)	10,000	10,000	0
Other right holders	88,400	88,400	0
of which employees of the subsidiary	*15,000*	*15,000*	*0*
PSR total	**98,400**	**98,400**	**0**
Average exercise price in EUR	**5.05**	**5.05**	**n/ a**

No previously issued rights under PSP 2015 were forfeited either in the reporting year or in the previous year. All rights under the program expired in the reporting period. The program is thereby terminated.

Consequently, the programs cannot result in future payment obligations.

3.9. Provisions

Provisions for personnel expenses in the total amount of EUR 623 thousand were recognized for unused vacation and bonus entitlements.

The remaining EUR 426 thousand in provisions was mainly attributable to provisions for outstanding invoices (EUR 113 thousand), audit and the annual financial statements (EUR 120 thousand), and potential payments to supervisory authorities (EUR 150 thousand), as well as a provision for storage of business documents (EUR 30 thousand), which is the only item classified as long-term provisions.

3.10. Liabilities

3.10.1. Remaining terms of reported liabilities

All reported liabilities are due within less than one year.

3.10.2. Other liabilities

The EUR 60 thousand in other liabilities includes EUR 31 thousand to the tax authority (2019: EUR 68 thousand) and EUR 0 thousand for social security (2019: EUR 0 thousand).

3.11. Deferred taxes

In order to calculate deferred taxes arising from temporary or other timing differences between the tax base and the carrying amounts of assets, liabilities and items of prepaid expenses and deferred income recognized in the financial statements, or from tax loss carryforwards, the amounts of the resulting tax burden and tax relief are

measured at the tax rate applicable to the individual company at the date on which the differences are reversed. They are not discounted. Deferred tax assets and liabilities are offset.

As of the reporting date, EUR 3.6 million in deferred tax assets (December 31, 2019: EUR 16 thousand) was identified due to differences between the carrying amounts in the financial statements and the tax accounts, based on the tax rate of 30.18% applicable in Berlin. The deferred tax assets result from different useful lives applied to items of tangible fixed assets.

From its founding through to December 31, 2019, the Company also accumulated tax loss carryforwards in Germany amounting to approximately EUR 211 million for corporate income tax and approximately EUR 209 million for trade tax. Furthermore, the Company estimates that the accumulated tax loss carryforwards in both aforementioned tax categories will increase by more than EUR 8 million when it files its tax returns for 2020. In accordance with German tax law, such tax losses have an unlimited carryforward period. As a consequence of completed tax audits, tax loss carryforwards in the amount of EUR 167 million are undisput ed. However, a future utilization of these carryforwards could become impossible under certain conditions (e.g., a major change of ownership and a change of business) based on the applicable German tax law. Due to the current financial situation of the Company, without sufficient liquidity to achieve the break-even point, valuation allowances have been recognized for the full amount of deferred tax assets at the balance sheet date.

4. Income statement disclosures

4.1. Sales

The Company generated a total of EUR 1,036 thousand in sales in the reporting period (2019: EUR 1,523 thousand).

Sales comprise product sales (EUR 489 thousand; 2019: EUR 990 thousand), of which product sales to affiliated companies (EUR 207 thousand; 2019: EUR 639 thousand), other income from sales to affiliated companies (EUR 453 thousand; 2019: EUR 269 thousand), licensing income (EUR 34 thousand; 2019: EUR 264 thousand), and income from R&D services (EUR 60 thousand; 2019: EUR 0 thousand). European customers accounted for 28% of sales (2019: 18%), with 72% attributable to customers from North America and Asia (2019: 82%).

4.2. Depreciation, amortization and write-downs

The EUR 171 thousand in depreciation, amortization and write-downs of intangible and tangible fixed assets in 2020 (2019: EUR 182 thousand) did not include any writedowns of tangible fixed assets (2019: write-downs of EUR 1 thousand).

The write-offs on current assets include the impairment of receivables from Epigenomics, Inc. as an affiliated company in the amount of EUR 12,016 thousand (see 3.4).

4.3. Other operating expenses

The other operating expenses of EUR 7,513 thousand (2019: EUR 9,933 thousand) include the costs for the corporate actions (EUR 418 thousand; 2019: EUR 1,243 thousand).

5. Other information

5.1. Human resources

The Company had an average of 26 employees and 3 members of the Executive Board during the reporting period, in accor dance with section 267 HGB (2019: 27/3). The 26 employees included 18 employees across the areas of research, product development, IP, regulatory affairs, quality assurance and manufacturing. The remaining eight employees in selling, general and administrative functions work in business and commercial development, accounting, finance, legal, human resources, IT and general management.

5.2. Executive bodies

5.2.1. Supervisory Board and Supervisory Board remuneration

The Supervisory Board of Epigenomics AG consists of six members with broad experience in the pharmaceutical, diagnostics or financial industries. All members are currently appointed until the Company's General Shareholders' Meeting in 2021.

- **Heino von Prondzynski – Einsiedeln (CH) – Chairman (since May 2, 2012)**
  Independent consultant and former member of the group management of F. Hoffmann-La Roche Ltd. (CEO of the Division Roche Diagnostics at F. Hoffmann-La Roche Ltd., Basel, CH)

  Supervisory Board member from May 2007 until March 2010 and since May 2012

  Heino von Prondzynski is not a member of other mandatory supervisory boards. He is/was a member of comparable boards with supervisory function of the following foreign undertakings: * Quotient Ltd., Eysins, Switzerland (Chairman of the Board of Directors); The Binding Site Group Ltd., Birmingham, UK.

- **Dr. Ann Clare Kessler – Rancho Santa Fe, CA (USA) – Vice-Chairwoman (since May 2, 2012)**
  Independent consultant and former Head of Global Project Management at F. Hoffmann-La Roche Ltd. (Basel, CH) and former Head of the Division of Exploratory Research at Hoffmann-La Roche Inc. (U.S.A.)

  Supervisory Board member since June 2005

  Dr. Ann Clare Kessler is not a member of other mandatory supervisory boards or comparable boards with supervisory function.

- **Prof. Dr. Günther Reiter – Pfullingen (GER) – Vice-Chairman (since November 5, 2014)**
  Professor at the ESB Business School in Reutlingen (GER)

  Supervisory Board member since June 2005; Chairman of the Audit Committee

  Prof. Dr. Reiter is not a member of other mandatory supervisory boards or comparable boards with supervisory function.

- **Dr. Helge Lubenow – Langenfeld (Rhineland) (GER)**
  CEO of ProteomediX AG, Zürich (CH) and former Head of the Molecular Diagnostic Business Area at Qiagen (GER)

  Supervisory Board member since May 2016; Member of the Audit Committee

  Dr. Lubenow is a member of comparable boards with supervisory function of the following German and foreign undertakings:

  * tesa Labtec GmbH, Hamburg, Germany (Chairwoman of the Advisory Board); * Indical TopCo AB, Sweden.

- **Franz Walt – Flims Dorf (CH)**
  CEO of Quotient Ltd., Eysins, Switzerland

  Supervisory Board member since May 2019; Member of the Audit Committee

  Franz Walt is not a member of other mandatory supervisory boards or comparable boards with supervisory function.

- **Alexander Link – Frankfurt am Main (GER)**
  CEO of Deutsche Balaton AG (Heidelberg)

  Supervisory Board member since June 2020

  Alexander Link is a member of comparable boards with supervisory function of the following German undertakings: CornerstoneCapital Beteiligungen GmbH, Frankfurt am Main, Germany (Managing Director); HW Verwaltungs AG, Halberstadt, Germany; PWI Pure System AG, Heidelberg, Germany; Tabalon Mobile Technologies AG, Heidelberg, Germany; Nordic SSW 1000 Verwaltungs AG, Hamburg, Germany; 4basebio AG, Heidelberg, Germany (Chairman of the Supervisory Board); SPK Süddeutsche Privatkapital AG, Heidelberg, Germany.

The remuneration structure for the Supervisory Board is based on an annual cash retainer ("fixed remuneration") and meeting-related payments ("variable remuneration"). The remuneration does not include any performance-related elements or longterm incentive components. The total remuneration of the members of the Supervisory Board amounted to EUR 263 thousand in 2020 and was broken down as follows:

EUR thousand	2019	2020
Fixed remuneration	225	215
Variable remuneration	56	48
Total remuneration	281	263

Further disclosures on the Supervisory Boar d and details of its members' remuneration can be found in the section entitled "Remuneration Report" in the 2020 management report.

5.2.2. Executive Board and Executive Board remuneration

The members of the Company's Executive Board throughout the entire fiscal year were:

- Greg Hamilton, Chief Executive Officer
- Jorge Garces, Ph.D., Chief Scientific Officer
- Albert Weber, Executive Vice President Finance

The remuneration of the members of the Company's Executive Board comprises a fixed and a variable component. The variable amount is determined on the basis of a variety of criteria, including the achievement of individual performance targets and Company performance targets, which are set by the Supervisory Board on a yearly basis. They are also entitled to reimbursement of certain costs incurred by them.

Apart from the fixed and variable components, a third remuneration component comprises a long-term performance-based compensation in the form of stock option rights (please see section 3.7.6). The Company also provides a D&O insurance policy for the members of the Executive Board with an excess in the statutory minimum amount, and reimburses business travel expenses in full.

Based on the benefits allocated, the remuneration of the members of the Executive Board in 2020 amounted to EUR 1,560 thousand (2019: EUR 2,031 thousand) and comprised:

EUR thousand	2019	2020
Fixed remuneration and fringe benefits	1,302	1,018
One-year variable remuneration	460	446
Multi-year variable remuneration	269	96
Total remuneration (benefits allocated)	2,031	1,560

The multi-year variable remuneration of the members of the Executive Board in 2020 comprised the award of 31,875 stock options (2019: 31,875).

Based on the benefits granted, the remuneration of the members of the Executive Board amounted to EUR 1,478 thousand in the reporting period (2019: EUR 1,966 thousand) and comprised:

EUR thousand	2019	2020
Fixed remuneration and fringe benefits	1,302	1,018
One-year variable remuneration	664	460
Multi-year variable remuneration	0	0
Total remuneration	1,966	1,478

The service agreement with Mr. Gregory Hamilton has a term until December 31, 2021, and the service agreement with Mr. Albert Weber has a term until December 31, 2022. Mr. Jorge Garces resigned from the Executive Board after the end of the reporting period (as of January 31, 2021) and left the Company. All service agreements contain post-contractual non-compete clauses for a period of one year after termination. During this period, all Executive Board members are entitled to 100% of their final basic salary as a non-compete payment. The service agreements also provide for a special right of termination in the even t of a change of control within the meaning of the German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*). If a service agreement is terminated pursuant to such a special right of termination, the members of the Executive Board are entitled to receive their basic salary for the remaining term of their service agreements, however up to a maximum of 150% of the severance payment cap stipulated in section 4.2.3 of the German Corporate Governance Code.

Further disclosures on the composition of the Executive Board in the reporting period and details of its members' remuneration can be found in the section entitled "Remuneration Report" in the 2020 management report.

5.3. Other financial obligations

A purchase commitment amounting to app roximately EUR 867 thousand to acquire goods and services from various suppliers was reported as of the balance sheet date.

The lease for the business premises at Geneststrasse in Berlin expires in April 2023 and gives rise to other financial obligations for ongoing lease payments amounting to approximately EUR 269 thousand (not discounted) until the end of the lease term. The Company has the option to extend the lease by three more years.

Other financial obligations to affiliated co mpany Epigenomics, Inc. are also likely to arise in fiscal year 2021. Since the market approval of Epi proColon by the U.S. Food and Drug Administration (FDA) in 2016, Epigenomics, Inc. has been responsible for distributing and marketing the product in the United States, and since that time has generated its own sales with third parties. For this purpose, the parent company granted Epigenomics, Inc. an exclusive license to market and distribute the product in North America, pursuant to which it now pays royalties to Epigenomics AG as a percentage of product sales. Obligations also arise from a transfer pricing arrangement between the two companies, pursuant to which the U.S. subsidiary provides various services for the parent company (e.g., carrying out clinical studies, market preparation, participation in regulatory processes) in return for fees calculated at arm's length using the cost plus method. By the same token, Epigenomics AG charges a service fee for various administrative services provided to its U.S. subsidiary (e.g., accounting, HR, IT).

The Company's corporate planning previously envisaged that the U.S. subsidiary would reach the break-even point relatively quickly following reimbursement decision for Epi proColon from payors in the U.S. healthcare system, which was expected at the end of 2019. The negative reimbursement decision issued by CMS shortly after the end of the reporting period, in January 2021, does not completely rule out reimbursements but does further delay the date on which they are potentially introduced for patients to undergo blood tests. The Company is reviewing all options to appeal the CMS decision or have it repealed. However, should the decision remain in force it will at least provide precisely quantifiable guidelines for getting this type of blood test approved for coverage. The Company has already been working successfully on the next generation of Epi proColon in recent years. The new blood-based test features performance characteristics that meet the latest requirements for sensitivity and specificity outlined in the final NCD issued by CMS. The Company's key priority is now to obtain the requisite FDA approval for this new version of its CRC screening test in the medium term and subsequently a coverage decision. Until then, however, Epigenomics, Inc. will remain incapable of generating sufficient revenues itself. In the meantime, the Company expects that Epigenomics, Inc. will have to be funded by means of short-term corporate lending not yet disbursed. Given these circumstances, Epigenomics, Inc. will not reach the break-even point before 2024. Until then, it requires approximately EUR 6–8 million in financ ing, assuming that the EUR/USD exchange rate in the relevant periods remains at the level of the reporting date. Added to this are the costs of the clinical study need to obtain FDA approval for the new test version, which as things currently stand are estimated at EUR 20–25 million.

5.4. Related party disclosures

As of the December 31, 2020 reporting date, Epigenomics AG held a 100% equity interest in the following company:

Epigenomics, Inc.
11055 Flintkote Avenue, Suite A
San Diego, CA 92121
U.S.A.

This company's net loss not covered by equity amounted to EUR 17,067 thousand as of December 31, 2020 (2019: EUR 15,350 thousand). It reported a net loss for the fiscal year ended December 31, 2020 in the amount of EUR 3,246 thousand (2019: EUR 6,960 thousand).

5.5. Information on the Company's auditors

The General Shareholders' Meeting in June 2020 appointed Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft as auditors for fiscal year 2020.

EUR thousand	2019	2020
Costs for audit services	108	121
Costs for other assurance services	80	0
Total	**188**	**121**

The audit costs cover the audit of the Company's annual and consolidated financial statements.

5.6. Report on post-balance sheet date events

Announcement dated January 7, 2021

After the end of the reporting period, on January 7, 2021, we announced that the Executive Board, with the consent of the Supervisory Board, had resolved a subordinate mandatory convertible bond issue with an aggregate principal amount of up to EUR 5.5 million. The bonds may be converted into a total of up to 5 million registered no-par value shares of the Company representing a total interest in the Company's share capital of up to EUR 5 million.

The mandatory convertible bond issue (com prising up to 500,000 bonds with a principal amount of EUR 11.00 each) will initially be offered for subscription to existing Epigenomics AG shareholders by means of a rights offering at an issue price of EUR 11.00 per bond. The subscription period for the Company's shareholders began on January 13, 2021 and ended on January 27, 2021. The bonds are zero-coupon bonds and will mature on February 29, 2024. The bond terms include conversion rights for bondholders, as well as the obligation to convert all outstanding bonds not yet converted on February 29, 2024. Subject to any antidilutive adjustments, the conversion price will be EUR 1.10 per share and the conversion ratio 1:10. In other words, each bond can be converted into ten no-par value registered shares, each representing an interest in the Company's share capital of EUR 1.00.

Furthermore, we announced our plans to use the proceeds from the mandatory convertible bond issue to finance the Company's business operations. The primary purpose was to ease the sense of financial urgency following the final decision by the U.S. Centers for Medicare & Medicaid Services (CMS), which was pending at that time in connection with the reimbursement process for the Epi proColon colorectal cancer screening test in the U.S.A. (national coverage determination, NCD) and to reduce the short-term dependency on the capital market environment. The proceeds were also aimed at providing financial security should there be any delay in announcement of the CMS decision.

Announcement dated January 19, 2021

After the end of the reporting period, on January 19, 2021, we announced that CMS had issued a negative reimbursement decision in connection with the national coverage determination (NCD) for Epi proColon, Epigenomics' blood test for colorectal cancer screening. The Company is currently weighing up various options, including launching an appeal, taking legal action and/or pursuing other alternatives to secure CMS reimbursement. In a subsequent press release we also announced that – building on our expertise in blood testing and DN A methylation biomarkers – we have developed and validated a new test for CRC screening with clinical performance that meets the new coverage criteria specified in the final NCD.

Announcement dated January 27, 2021

After the end of the reporting period, on January 27, 2021, we announced that Jorge Garces, Ph.D., President and Chief Scientific Officer, would be leaving the Executive Board of Epigenomics AG as of January 31, 2021. Mr. Garces transitioned to an advisory role until the end of 2021 and will help the Company weigh up and implement strategic alternatives for its further development.

5.7. Corporate governance disclosures

In the October of the reporting period, the Executive Board and the Supervisory Board of Epigenomics AG issued the declaration of compliance pursuant to section 161 of the German Stock Corporation Act (*Aktiengesetz*– AktG). The declaration is published on the Company's website (www.epigenomics.com/news-investors/corporate-governance). For further information, please see the section entitled "Corporate Governance" in the management report.

5.8. Disclosures in accordance with the German Securities Trading Act (WpHG)

Since the balance sheet date for the 2019 annual financial statements, Epigenomics AG has received the following voting rights notifications from its shareholders making notification in accordance with the German Securities Trading Act (*Wertpapierhandelsgesetz*– WpHG) of changes in the direct share of voting rights held by them:

Epigenomics AG: Release according to Article 40, Section 1 of the WpHG [the German Securities Trading Act] with the objective of Europe-wide distribution

Epigenomics AG

26.10.2020 / 09:53

Dissemination of a Voting Rights Announcement transmitted by DGAP – a service of EQS Group AG.

The issuer is solely responsible for the content of this announcement.

Notification of Major Holdings

1. Details of issuer

Name:	Epigenomics AG
Street:	Geneststraße 5
Postal code:	10829
City:	Berlin Germany
Legal Entity Identifier (LEI):	549300X1C4U862NDLN97

2. Reason for notification

X	Acquisition/disposal of shares with voting rights
	Acquisition/disposal of instruments
	Change of breakdown of voting rights
	Other reason:

3. Details of person subject to the notification obligation

Legal entity: Morgan Stanley City of registered office, country: Wilmington, Delaware, United States of America (USA)

4. Names of shareholder(s)

holding directly 3% or more voting rights, if different from 3.

Morgan Stanley & Co. LLC

5. Date on which threshold was crossed or reached:

19 Oct 2020

6. Total positions

	% of voting rights attached to shares (total of 7.a.)	% of voting rights through instruments (total of 7.b.1 + 7.b.2)	Total of both in % (7.a. + 7.b.)	Total number of voting rights pursuant to Sec. 41 WpHG
New	9.91 %	0.03 %	9.94 %	47129846
Previous notification	11.60 %	0.03 %	11.64 %	/

7. Details on total positions

a. Voting rights attached to shares (Sec. 33, 34 WpHG)

ISIN	Absolute		In %	
	Direct (Sec. 33 WpHG)	Indirect (Sec. 34 WpHG)	Direct (Sec. 33 WpHG)	Indirect (Sec. 34 WpHG)
DE000A11QW50	0	4670515	0.00 %	9.91 %
Total	4670515		9.91 %	

b.1. Instruments according to Sec. 38 (1) no. 1 WpHG

Type of instrument	Expiration or maturity date	Exercise or conversion period	Voting rights absolute	Voting rights in %
Right of recall over securities lending agreements	at any time	at any time	15838	0.03 %
		Total	15838	0.03 %

b.2. Instruments according to Sec. 38 (1) no. 2 WpHG

Type of instrument	Expiration or maturity date	Exercise or conversion period	Cash or physical settlement	Voting rights absolute	Voting rights in %
				0	0.00 %
			Total	0	0.00 %

8. Information in relation to the person subject to the notification obligation

	Person subject to the notification obligation is not controlled nor does it control any other undertaking(s) that directly or indirectly hold(s) an interest in the (underlying) issuer (1.).
X	Full chain of controlled undertakings starting with the ultimate controlling natural person or legal entity:

Name	% of voting rights (if at least 3% or more)	% of voting rights through instruments (if at least 5% or more)	Total of both (if at least 5% or more)
Morgan Stanley	%	%	%

Morgan Stanley Capital Management, LLC	%	%	%
Morgan Stanley Domestic Holdings, Inc.	%	%	%
Morgan Stanley & Co. LLC	9.66 %	%	9.68 %
–	%	%	%
Morgan Stanley	%	%	%
Morgan Stanley Capital Management, LLC	%	%	%
Morgan Stanley Domestic Holdings, Inc.	%	%	%
Morgan Stanley & Co. LLC	%	%	%
Prime Dealer Services Corp.	%	%	%
–	%	%	%
Morgan Stanley	%	%	%
E*TRADE Financial, LLC	%	%	%
ETCM Holdings, LLC	%	%	%
E*TRADE Securities LLC	%	%	%

9. In case of proxy voting according to Sec. 34 para. 3 WpHG

(only in case of attribution of voting rights in accordance with Sec. 34 para. 1 sent. 1 No. 6 WpHG)

Date of general meeting:

Holding total positions after general meeting (6.) after annual general meeting:

Proportion of voting rights	Proportion of instruments	Total of both
%	%	%

10. Other explanatory remarks:

The notification was triggered due to a disposal of client securities over which Morgan Stanley & Co. LLC had a right of use.

Date

23 Oct 2020

26.10.2020 The DGAP Distribution Services include Regulatory Announcements, Financial/Corporate News and Press Releases.
Archive at www.dgap.de

Language: English
Company: Epigenomics AG
Geneststraße 5
10829 Berlin
Germany
Internet: www.epigenomics.com
End of NewsDGAP News Service

Epigenomics AG: Release according to Article 40, Section 1 of the WpHG [the German Securities Trading Act] with the objective of Europe-wide distribution

Epigenomics AG

26.10.2020 / 09:20

Dissemination of a Voting Rights Announcement transmitted by DGAP – a service of EQS Group AG.

The issuer is solely responsible for the content of this announcement.

Notification of Major Holdings

1. Details of issuer

Name:	Epigenomics AG
Street:	Geneststraße 5
Postal code:	10829
City:	Berlin Germany
Legal Entity Identifier (LEI):	549300X1C4U862NDLN97

2. Reason for notification

X	Acquisition/disposal of shares with voting rights
	Acquisition/disposal of instruments
	Change of breakdown of voting rights
	Other reason:

3. Details of person subject to the notification obligation

Natural person (first name, surname): Ari Zweiman Date of birth: 15 Apr 1972

4. Names of shareholder(s)

holding directly 3% or more voting rights, if different from 3.

5. Date on which threshold was crossed or reached:

19 Oct 2020

6. Total positions

	% of voting rights attached to shares (total of 7.a.)	% of voting rights through instruments (total of 7.b.1 + 7.b.2)	Total of both in % (7.a. + 7.b.)	Total number of voting rights pursuant to Sec. 41 WpHG
New	0.02 %	0.00 %	0.02 %	47129846
Previous notification	5.16 %	0.00 %	5.16 %	/

7. Details on total positions

a. Voting rights attached to shares (Sec. 33, 34 WpHG)

ISIN	Absolute		In %	
	Direct (Sec. 33 WpHG)	Indirect (Sec. 34 WpHG)	Direct (Sec. 33 WpHG)	Indirect (Sec. 34 WpHG)
DE000A11QW50	0	9712	0.00 %	0.02 %
Total	9712		0.02 %	

b.1. Instruments according to Sec. 38 (1) no. 1 WpHG

Type of instrument	Expiration or maturity date	Exercise or conversion period	Voting rights absolute	Voting rights in %
			0	0.00 %
		Total	0	0.00 %

b.2. Instruments according to Sec. 38 (1) no. 2 WpHG

Type of instrument	Expiration or maturity date	Exercise or conversion period	Cash or physical settlement	Voting rights absolute	Voting rights in %
				0	0.00 %
			Total	0	0.00 %

8. Information in relation to the person subject to the notification obligation

	Person subject to the notification obligation is not controlled nor does it control any other undertaking(s) that directly or indirectly hold(s) an interest in the (underlying) issuer (1.).
X	Full chain of controlled undertakings starting with the ultimate controlling natural person or legal entity:

Name	% of voting rights (if at least 3% or more)	% of voting rights through instruments (if at least 5% or more)	Total of both (if at least 5% or more)
Ari Zweiman	%	%	%

683 Capital GP, LLC	%	%	%
683 Capital Partners, LP	%	%	%
–	%	%	%
Ari Zweiman	%	%	%
683 Capital Management LLC	%	%	%

9. In case of proxy voting according to Sec. 34 para. 3 WpHG

(only in case of attribution of voting rights in accordance with Sec. 34 para. 1 sent. 1 No. 6 WpHG)

Date of general meeting:

Holding total positions after general meeting (6.) after annual general meeting:

Proportion of voting rights	Proportion of instruments	Total of both
%	%	%

10. Other explanatory remarks:

Date

22 Oct 2020

26.10.2020 The DGAP Distribution Services include Regulatory Announcements, Financial/Corporate News and Press Releases.

Archive at www.dgap.de

Language: English
Company: Epigenomics AG
Geneststraße 5
10829 Berlin
Germany
Internet: www.epigenomics.com
End of NewsDGAP News Service

Epigenomics AG: Release according to Article 40, Section 1 of the WpHG [the German Securities Trading Act] with the objective of Europe-wide distribution

Epigenomics AG

21.04.2020 / 10:53

Dissemination of a Voting Rights Announcement transmitted by DGAP – a service of EQS Group AG.

The issuer is solely responsible for the content of this announcement.

Notification of Major Holdings

1. Details of issuer

Name:	Epigenomics AG
Street:	Geneststraße 5
Postal code:	10829
City:	Berlin Germany
Legal Entity Identifier (LEI):	549300X1C4U862NDLN97

2. Reason for notification

X	Acquisition/disposal of shares with voting rights
	Acquisition/disposal of instruments
	Change of breakdown of voting rights
	Other reason:

3. Details of person subject to the notification obligation

Natural person (first name, surname): Jacob Gottlieb Date of birth: 01.09.1971

4. Names of shareholder(s)

holding directly 3% or more voting rights, if different from 3.

Altium Growth Fund, LP

5. Date on which threshold was crossed or reached:

07.04.2020

6. Total positions

	% of voting rights attached to shares (total of 7.a.)	% of voting rights through instruments (total of 7.b.1 + 7.b.2)	Total of both in % (7.a. + 7.b.)	Total number of voting rights pursuant to Sec. 41 WpHG
New	5,19 %	%	5,19 %	47129846
Previous notification	%	%	%	/

7. Details on total positions

a. Voting rights attached to shares (Sec. 33, 34 WpHG)

ISIN	Absolute		In %	
	Direct (Sec. 33 WpHG)	Indirect (Sec. 34 WpHG)	Direct (Sec. 33 WpHG)	Indirect (Sec. 34 WpHG)
DE000A11QW50		2444667	%	5,19 %
Total	2444667		5,19 %	

b.1. Instruments according to Sec. 38 (1) no. 1 WpHG

Type of instrument	Expiration or maturity date	Exercise or conversion period	Voting rights absolute	Voting rights in %
				%
		Total		%

b.2. Instruments according to Sec. 38 (1) no. 2 WpHG

Type of instrument	Expiration or maturity date	Exercise or conversion period	Cash or physical settlement	Voting rights absolute	Voting rights in %
					%
			Total		%

8. Information in relation to the person subject to the notification obligation

	Person subject to the notification obligation is not controlled nor does it control any other undertaking(s) that directly or indirectly hold(s) an interest in the (underlying) issuer (1.).
X	Full chain of controlled undertakings starting with the ultimate controlling natural person or legal entity:

Name	% of voting rights (if at least 3% or more)	% of voting rights through instruments (if at least 5% or more)	Total of both (if at least 5% or more)
Jacob Gottlieb	%	%	%

Altium Growth GP, LLC	%	%	%
Altium Growth Fund, LP	5,19 %	%	5,19 %
Jacob Gottlieb	%	%	%
Altium Capital GP, LLC	%	%	%
Altium Capital Management, LP	5,19 %	%	5,19 %

9. In case of proxy voting according to Sec. 34 para. 3 WpHG

(only in case of attribution of voting rights in accordance with Sec. 34 para. 1 sent. 1 No. 6 WpHG)

Date of general meeting:

Holding total positions after general meeting (6.) after annual general meeting:

Proportion of voting rights	Proportion of instruments	Total of both
%	%	%

10. Other explanatory remarks:

Date

20.04.2020

21.04.2020 The DGAP Distribution Services include Regulatory Announcements, Financial/Corporate News and Press Releases.

Archive at www.dgap.de

Language: English
Company: Epigenomics AG
Geneststraße 5
10829 Berlin
Germany
Internet: www.epigenomics.com
End of NewsDGAP News Service

Berlin, March 2021

The Executive Board

Statement of changes in fixed assets as of December 31, 2020

	Cost				Depreciation, amortization and write-downs				Carrying amounts	
	Jan. 1, 2020	Additions	Disposals	Dec. 31, 2020	Jan. 1, 2020	Additions	Disposals	Dec. 31, 2020	Carrying amounts as of Jan. 1, 2020	Carrying amounts as of Dec. 31, 2020
Intangible fixed assets										
1. Purchased concessions, industrial and similar rights and assets, and licenses in such rights and assets	1,496,959.09	0.00	-1,020,787.94	476,171.15	-1,376,106.57	-72,536.05	1,020,787.94	-427,854.68	120,852.52	48,316.47
Total	**1,496,959.09**	**0.00**	**-1,020,787.94**	**476,171.15**	**-1,376,106.57**	**-72,536.05**	**1,020,787.94**	**-427,854.68**	**120,852.52**	**48,316.47**
Tangible fixed assets										
1. Leasehold improvements	558,614.95	0.00	0.00	558,614.95	-260,408.89	-44,168.95	0.00	-304,577.84	298,206.06	254,037.11
2. Technical equipment and machinery	1,628,113.46	8,045.77	-46,834.33	1,589,324.90	-1,333,141.28	-48,763.45	46,834.33	-1,335,070.40	294, 972.18	254,254.50
3. Other equipment, operating and office equipment	71,954.53	0.00	0.00	71,954.53	-44,850.99	-5,683.34	0.00	-50,534.33	27,103.54	21,420.20
Total	**2,258,682.94**	**8,045.77**	**-46,834.33**	**2,219,894.38**	**-1,638,401.16**	**-98,615.74**	**46,834.33**	**-1,690,182.57**	**620,281.78**	**529,711.81**
Long-term financial assets										
1. Shares in affiliated companies	3,487,047.49	0.00	0.00	3,487,047.49	-2,700,047.49	0.00	0.00	-2,700,047.49	787,000.00	787,000.00
Total	**3,487,047.49**	**0.00**	**0.00**	**3,487,047.49**	**-2,700,047.49**	**0.00**	**0.00**	**-2,700,047.49**	**787,000.00**	**787,000.00**
Total fixed assets	**7,242,689.52**	**8,045.77**	**-1,067,622.27**	**6,183,113.02**	**-5,714,555.22**	**-171,151.79**	**1,067,622.27**	**-4,818,084.74**	**1,528,134.30**	**1,365,028.28**

Net assets

	2020		2019		Change	
	EUR thousand	%	EUR thousand	%	EUR thousand	%
Inventories	98	0.9%	178	0.6%	-80	-44.9%
Trade receivables	65	0.6%	59	0.2%	6	10.0%
Receivables from affiliated companies	5,000	44.6%	15,294	54.5%	-10,294	-67.3%
Cash	3,319	29.6%	9,558	34.0%	-6,239	-65.3%
Other current assets and other assets	1,354	12.1%	1,471	5.2%	-117	-7.9%
CURRENT ASSETS	**9,836**	**87.8%**	**26,560**	**94.6%**	**-16,724**	**-63.0%**
Provisions	1,019	9.1%	1,005	3.6%	14	1.4%
Advanced payments received	8	0.1%	46	0.2%	-39	-83.1%
Trade payables	459	4.1%	880	3.1%	-421	-47.8%
Other current liabilities	131	1.2%	579	2.1%	-447	-77.3%
CURRENT LIABILITIES	**1,617**	**14.4%**	**2,510**	**8.9%**	**-893**	**-35.6%**
NET CURRENT ASSETS	**8,220**	**73.4%**	**24,050**	**85.6%**	**-15,831**	**-65.8%**
Intangible fixed assets	48	0.4%	121	0.4%	-73	-60.0%
Tangible fixed assets	530	4.7%	620	2.2%	-91	-14.6%
Long-term financial assets	787	7.0%	787	2.8%	0	0.0%
FIXED ASSETS	**1,365**	**12.2%**	**1,528**	**5.4%**	**-163**	**-10.7%**
Other non-current provisions	30	0.3%	36	0.1%	-6	-15.6%
NON-CURRENT LIABILITIES	**30**	**0.3%**	**36**	**0.1%**	**-6**	**-15.6%**
EQUITY	**9,554**	**85.3%**	**25,543**	**90.9%**	**-15,988**	**-62.6%**
TOTAL ASSETS/ TOTAL EQUITY AND LIABILITIES	**11,201**	**100.0%**	**28,088**	**100.0%**	**-16,887**	**-60.1%**

COMPOSITION OF EQUITY	2020 EUR thousand	2019 EUR thousand	Change EUR thousand	%
Subscribed capital	5,891	43,528	-37,636	-86.5%
Capital reserve	71,459	53,604	17,855	33.3%
Net loss	-67,795	-71,589	3,794	-5.3%
EQUITY	**9,554**	**25,543**	**-15,988**	**-62.6%**

Financial position (cash flow statement)

		2020 EUR thousand	2019 EUR thousand
1.	Net loss for the year	-19,987	-9,702
2.	Depreciation, amortization and write-downs of fixed assets	171	182
3.	Write-offs on current assets	12,016	0
4.	Increase in provisions	8	-484
5.	Other non-cash income	-81	-228
6.	Increase in inventories, trade receivables and other assets not attributable to investing or financing activities	-1,449	-5,167
7.	Change in trade payables and other liabilities not attributable to investing or financing activities	-152	1,396
8.	Loss on disposal of fixed assets	0	1
9.	Interest income	-21	-169
10.	**Cash flows from operating activities**	**-9,495**	**-14,171**
11.	Payments for acquisition of intangible fixed assets	-6	-47
12.	Payments for acquisition of tangible fixed assets	-8	-69
13.	Interest received	21	169
14.	**Cash flows from investing activities**	**7**	**53**
15.	Proceeds from the issue of new shares	3,998	8,332
16.	Payments for the creation of new shares	-726	-983
17.	Payments for the reduction of share capital	-23	0
20.	**Cash flows from financing activities**	**3,249**	**7,349**
21.	Net change in cash funds	-6,239	-6,769
22.	Cash funds at the beginning of period	9,558	16,327
23.	**CASH FUNDS at the end of period**	**3,319**	**9,558**
	Cash funds at the end of period include: cash-in-hand, cash and cash equivalents (see 3.6)	3,319	9,558
	TOTAL	**3,319**	**9,558**

Results of operations

	2020		2019		Change	
	EUR thousand	%	EUR thousand	%	EUR thousand	%
Sales	1,036	108.4%	1,523	99.4%	-487	-32.0%
Changes in inventories	-80	-8.4%	9	0.6%	-89	-1009.3%
GROSS REVENUE	**956**	**100.0%**	**1,532**	**100.0%**	**-576**	**-37.6%**
Cost of materials/raw materials, consumabl	298	31.2%	962	62.8%	-664	-69.0%
Cost of materials/purchased services	3	0.3%	12	0.8%	-9	-74.5%
GROSS EARNINGS	**655**	**68.5%**	**559**	**36.5%**	**96**	**17.2%**
Other operating income	1,829	191.3%	3,344	218.3%	-1,515	-45.3%
GROSS PROFIT	**2,484**	**259.8%**	**3,903**	**254.7%**	**-1,419**	**-36.4%**
Personnel expenses	2,791	292.0%	3,661	239.0%	-870	-23.8%
Depreciation, amortization and write-down	12,187	1274.9%	182	11.9%	12,005	6584.0%
Other operating expenses	7,513	786.0%	9,933	648.4%	-2,420	-24.4%
of which for operations	1,613	168.7%	3,878	253.1%	-2,265	-58.4%
of which for administration	2,875	300.8%	3,963	258.7%	-1,088	-27.5%
of which for sales and distribution	145	15.2%	196	12.8%	-51	-26.0%
of which miscellaneous other operating	2,880	301.3%	1,896	123.8%	984	51.9%
OPERATING RESULT	-20,008	-2093.0%	-9,874	-644.5%	-10,134	102.6%
FINANCIAL RESULT	21	2.2%	172	11.2%	-151	-87.9%
NET LOSS FOR THE YEAR BEFORE TAX	**-19,987**	**-2090.9%**	**-9,702**	**-633.3%**	**-10,285**	**106.0%**
Taxes on income	0	0.0%	0	0.0%	0	0.0%
NET LOSS FOR THE YEAR	**-19,987**	**-2090.9%**	**-9,702**	**-633.3%**	**-10,285**	**106.0%**

Statement of changes in equity as of December 31, 2020

	Subscribed capital	Capital reserve	Accumulated losses brought forward	Net loss for the year	Equity
December 31, 2019	**43,527,692.00**	**53,603,836.93**	**-61,886,680.17**	**-9,702,194.67**	**25,542,654.09**
Total result 2020	0.00	0.00	0.00	-19,986,740.24	-19,986,740.24
Transfer of net loss for the year 2019 to accumulated losses	0.00	0.00	-9,702,194.67	9,702,194.67	0.00
Capital increase with subscription rights	3,602,154.00	0.00	0.00	0.00	3,602,154.00
Premium from the capital increase with subscription rights	0.00	396,236.94	0.00	0.00	396,236.94
Consolidation of shares (8 to 1)	-41,238,610.00	17,458,438.60	23,780,171.40	0.00	0.00
Redemption of shares	-6.00	6.00	0.00	0.00	0.00
December 31, 2020	**5,891,230.00**	**71,458,518.47**	**-47,808,703.44**	**-19,986,740.24**	**9,554,304.79**

INDEPENDENT AUDITOR'S REPORT

To Epigenomics AG, Berlin

REPORT ON THE AUDIT OF THE ANNUAL FINANCIAL STATEMENTS AND THE MANAGEMENT REPORT

Audit opinions

We have audited Epigenomics AG's annual financial statements – comprising the balance sheet as of December 31, 2020, the income statement for the fiscal year from January 1, 2020 through December 31, 2020 as well as the notes to the annual financial statements, including a summary of significant accounting methods. Furthermore, we have audited Epigenomics AG's management report for the fiscal year from January 1, 2020 through December 31, 2020. In accordance with German legal requirements, we have not audited the statement on corporate governance and the compliance statement contained in the management report's section "Corporate Governance".

In our opinion, on the basis of the knowledge obtained in the audit,

- the attached annual financial statements comply, in all material respects, with German commercial law as applicable to corporations and provides, in compliance with German generally accepted accounting principles, a true and fair view of the Company's assets, liabilities, and financial position as of December 31, 2020, and of its financial performance for the fiscal year from January 1, 2020 through December 31, 2020; and
- the attached management report as a whole provides a true and fair view of the Company's position. In all material respects, this management report is consistent with the annual financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of the Company's future development.

Pursuant to Art. 322 Sec. 3 sentence 1 HGB, we declare that our audit has not led to any reservations relating to the annual financial statements' and the management report's legal compliance.

Basis for the audit opinions

We have conducted our audit of the annual financial statements and of the management report in accordance with Art. 317 HGB and the EU Audit Regulation (No. 537/2014, hereinafter referred to as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for the Audit of Financial Statements issued by the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer;*

“IDW”). Our responsibilities under these requirements and principles are further described in our audit opinion’s section “Auditor’s Responsibilities for the Audit of the Annual Financial Statements and of the Management Report”. We are independent of the Company in accordance with the requirements pursuant to European law as well as German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 Sec. 2 lit. f of the EU Audit Regulation, we declare that we have not provided any non-audit services prohibited under Article 5 Sec. 1 of the EU Audit Regulation. We believe the audit evidence we have obtained is sufficient and appropriate in order to provide a basis for our audit opinions on the annual financial statements and on the management report.

Material uncertainty in connection with the continuation as a going concern

Facts and problems

We refer to the disclosures "General Principles" in the notes to the financial statements and the disclosures in the section "Financial opportunities and risks" of the management report, according to which, with a liquidity of EUR 4.3 million at the balance sheet date and a convertible bond in the amount of EUR 5.5 million placed in January 2021, the Company's continued existence as a going concern is ensured beyond the first quarter of 2022. Furthermore, it is stated that the Company's ability to continue as a going concern beyond this date is at risk without further capital measures. As stated in the disclosures in the management report’s section "Financial opportunities and risks", these events and circumstances indicate the existence of a material uncertainty as it may cast significant doubt on the Company's ability to continue as a going concern and represents a going concern risk pursuant to Art. 322 Sec. 2 sentence 3 HGB. We have not modified our audit opinions with regard to this matter.

In our opinion, the corporate planning required and the clear and appropriate reporting in this respect present a high risk of material misstatement, which is why in our opinion this issue is of particular importance.

Audit approach and findings

As part of our audit, we considered whether the preparation of the annual financial statements on a going concern basis and the disclosures risks jeopardizing the Company’s continued existence as a going concern in the notes to the annual financial statements and the management report are appropriate. The corporate planning presented to us has been approved by the Supervisory Board. We have

checked the plausibility of this planning against the Company's development in recent years and the current cost structure. We also checked the planning for consistency and possible inconsistencies and discussed and critically reviewed the planning parameters with the Management Board. According to the results of our audit, the corporate planning is coherent and plausible and the planning parameters are realistic.

Key audit matters in the audit of the annual financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the annual financial statements for the fiscal year from January 1, 2020 through December 31, 2020. These matters have been taken into account in connection with our audit of the annual financial statements as a whole, and in forming our audit opinion related herewith; we do not express a separate audit opinion on these matters. In addition to the facts described in the section "Material uncertainty in connection with the going concern assumption", we have determined the facts described below as particularly important audit matters to be reported in our audit certificate.

From our perspective, the following matters were of most significance during our audit:
Revenue recognition

Recoverability of the participation and of receivables from Epigenomics Inc.

We have structured our presentation of these key audit matters as follows:

1.) Facts and problems

2.) Audit approach and findings

3.) Reference to further information

In the following, we will present these key audit matters:

Revenue recognition:

1. During the financial year, the Company recognized sales revenues in the amount of about EUR 1.0 million. Sales revenues are one of the most significant financial performance indicators in the capital market communication. These sales revenues include sales of the only main product in the amount of EUR 0.5 million, R&D revenues of EUR 0.06 million and license revenues in the amount of EUR 0.03 million. To some extent, there are framework agreements with customers which can be supplemented by further agreements. These agreements may be decisive as to whether a sale has been realized. An incomplete presentation of

these additional agreements within the scope of revenue recognition poses a risk, which is why we believe this matter is of particular importance.

2. We have convinced ourselves from the correct recognition of sales by means of framework agreements, proofs of delivery as well as the outgoing invoices and the related incoming payments.
3. The Company’s statements on the revenue recognition are contained in the annual financial statements’ notes’ section “Accounting and valuation principles”.

Recoverability of the participation and the receivables from Epigenomics Inc.:

1. The investment in Epigenomics Inc. reported in the Company's financial statements (EUR 0.8 million) and the receivables from Epigenomics Inc. (EUR 5.0 million) represent with EUR 5.8 million about 52% of the balance sheet total and are thus of significant importance for the Company's asset situation. The impairment test of these assets is complex and largely depends on the estimates of future business development, the interest rate used for discounting future cash inflows and further estimations. These assumptions are inherently subject to uncertainty.
2. In testing for impairment, we find satisfactory to the reasonableness of the significant value-determining assumptions and the appropriateness of the parameters used. We assessed the adequacy of the controls established by the Company to ensure that the underlying assumptions are regularly updated by the Management Board and approved by the Supervisory Board. Furthermore, we satisfied ourselves of the Company's forecast quality to date by comparing forecasts from previous financial years with actual results and analyzing deviations. We assessed the significant value-determining parameters on which the discount rate is based, using market data, and traced the underlying valuation methods. The estimates and assumptions made by management are within reasonable ranges.
3. The company's disclosures on its shareholding in and receivables from affiliated companies are included in the notes to the financial statements in the sections "Accounting and valuation principles" and "Receivables from affiliated companies”.

Other information

The executive directors are responsible for the other information. Other information comprises the following documents obtained by us prior to this audit opinion’s date:

- Compliance statement in the section "Corporate Governance" of the 2020 Management Report,
- declaration on corporate governance in the section "Corporate Governance" of the 2020 Management Report,
- section "epi procolon® in the 2020 annual report,
- section "Foreword by the Executive Board" in the 2020 annual report,
- section "Our share" in the 2020 annual report and

- section "Responsibility statement by the legal representatives" in the 2020 annual report.

The supervisory board is responsible for the following other information:

- The section "Report of the Supervisory Board" in the 2020 annual report.

Our audit opinions on the annual financial statements and on the management report do not cover such other information, and consequently we do not express an audit opinion or any other form of audit conclusion thereupon.

In connection with our audit, our responsibility is to read the other information and, in doing so, to assess whether the other information

- is materially inconsistent with the annual financial statements, with the management report or the knowledge obtained during our audit; or
- otherwise seems to have been materially misstated.

Legal Representative's and the Supervisory Board's Responsibilities for the Annual Financial Statements and the Management Report

The legal representatives are responsible for the preparation of the annual financial statements that comply, in all material respects, with German commercial law as applicable to corporations and that the annual financial statements, in compliance with German generally accepted accounting principles, provide a true and fair view of the Company's net assets, liabilities, financial position, and profit situation. Further-more, the legal representatives are responsible for such internal controls they have deemed necessary in order to enable the preparation of annual financial statements that are free from material misstatements, whether due to fraud or error.

When preparing the annual financial statements, the legal representatives are responsible for assessing the Company's ability to continue as a going concern. They also have the responsibility to disclose, as applicable, matters related to the Company's continued existence as a going concern. Furthermore, they are responsible for financial reporting on a going concern basis unless otherwise required due to actual or legal circumstances.

Furthermore, the legal representatives are responsible for the preparation of the management report that, as a whole, provides a true and fair view of the Company's position and is, in all material respects, consistent with the annual financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. Furthermore, the legal representatives are responsible for such arrangements and measures (systems) they have considered necessary in order to enable the preparation of a management report in accordance with the applicable German legal requirements

and in order to be able to provide sufficient appropriate evidence for the statements made in the management report.

The Supervisory Board is responsible for monitoring the Company's financial reporting process for the preparation of the annual financial statements and the management report.

Auditor's Responsibilities for the Audit of the Annual Financial Statements and the Management Report

Our objective is to obtain reasonable assurance as to whether the annual financial statements as a whole are free from material misstatements, whether due to fraud or error, and whether the management report as a whole presents a true and fair view of the Company's position and is, in all material respects, consistent with the annual financial statements and the knowledge obtained during our audit, complies with German legal requirements and appropriately presents the opportunities and risks of the Company's future development, as well as to issue an audit report that includes our audit opinions on the annual financial statements and on the management report.

Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with Art. 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for the Audit of Financial Statements as issued by the IDW will always detect any material misstatement. Misstatements can arise from fraud or error and are considered material if they, individually or in the aggregate, could reasonably be expected to influence the economic decisions of users taken on the basis of these annual financial statements and the management report.

We exercise professional judgment and maintain professional skepticism throughout the entire audit. We also:

- identify and assess the risks of material misstatements in the annual financial statements and the management report, whether due to fraud or error, plan and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting any material misstatements resulting from fraud is higher than for those resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls;
- obtain an understanding of the internal control system relevant for the audit of the annual financial statements and of arrangements and measures relevant for the audit of the management report, in order to plan audit procedures that are

appropriate under the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems;

- evaluate the appropriateness of accounting methods applied by the legal representatives and the reasonableness of estimates made by the legal representatives as well as the related disclosures;
- draw conclusions on the appropriateness of the going concern principle applied by the legal representatives and, based on the audit evidence obtained, whether there is a material uncertainty in connection with events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that there is a material uncertainty, we are required to draw attention in the audit certificate to the related disclosures in the annual financial statements or, if such disclosures are inadequate, to modify our respective audit opinion. Our conclusions are based on the audit evidence obtained up to the date of our audit certificate. However, future events or conditions may cause the Company to cease to continue as a going concern;
- evaluate the overall presentation, structure and content of the annual financial statements, including the disclosures, and whether the annual financial statements present the underlying transactions and events in a manner that the annual financial statements, in compliance with German generally accepted accounting principles, provide a true and fair view of the Company's net assets, financial position and profit situation;
- evaluate the management report's consistency with the annual financial statements, its conformity with German law, and its presentation of the Company's position;
- perform audit procedures on the prospective information presented by the legal representatives in the management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the legal representatives as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We discuss with those charged with governance, inter alia, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in the internal control system we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and discuss with them all relationships and other matters that may reasonably be expected to affect our independence and, where applicable, the applied safeguards.

From the matters discussed with those charged with governance, we determine those matters that were of most importance in the audit of the current reporting period's consolidated financial statements and are therefore the key audit matters. We describe these matters in our audit certificate unless the matter's public disclosure should be precluded by any law or other regulation.

OTHER LEGAL AND REGULATORY REQUIREMENTS

Report on the Assurance in accordance with section 317 (3b) HGB on the Electronic Reproduction of the Financial Statements on the Management Report Prepared for Publication Purposes

Audit opinion

Pursuant to Art. 317 Sec. 3b HGB, we have performed an audit in order to determine with reasonable assurance whether the reproductions of the annual financial statements and the management report (hereinafter also referred to as the "ESEF documents") contained in the attached file 11-03-2021-16-54_xbrl_file.xhtml (SHA256 hash value: F87FE1FDF84BF99B778FF6822B879877AE6AEC07FA67D9C0C949A015C85BC613) and prepared for disclosure purposes comply in all material respects with the requirements pursuant to Art. 328 Sec. 1 HGB regarding the electronic reporting format ("ESEF format"). In accordance with German legal requirements, such audit extends only to the conversion of the information contained in the annual financial statements and the management report into the ESEF format and therefore neither to the information contained in these reproductions nor to any other information contained in the aforementioned file.

According to our assessment, the reproductions of the annual financial statements and the management report contained in the aforementioned attached file and prepared for disclosure purposes comply, in all material respects, with the electronic reporting format requirements pursuant to Art. 328 Sec. 1 HGB. We do not express an audit opinion on the information contained in these reproductions or on the other information contained in the above-mentioned file beyond the scope of this audit opinion and our audit opinions on the attached annual financial statements and the attached management report for the fiscal year from January 1, 2020 to December

31, 2020 contained in the preceding "Report on the audit of the annual financial statements and the management report".

Basis for our audit opinion

We conducted our audit of the reproductions of the annual financial statements and the management report contained in the above-mentioned attached file in accordance with Art. 317 Sec. 3b HGB and in compliance with the draft IDW Auditing Standard: Audit of Electronic Reproductions of Financial Statements and Management Reports Prepared for the Purpose of Disclosure pursuant to Art. 317 Sec. 3b HGB (IDW EPS 410). Our responsibility in accordance with such standard is further described in the section "Auditor's Responsibility for the Audit of the ESEF Documents". Our auditing practice complies with the quality assurance system requirements of the IDW Quality Assurance Standard: Requirements to Quality Assurance in Auditing Practice (IDW QS 1).

Legal Representative's and Supervisory Board's responsibilities for the ESEF documents

The Company's legal representatives are responsible for the preparation of the ESEF documents containing the electronic reproductions of the annual financial statements and the management report in accordance with Art. 328 Sec. 1 sentence 4 no. 1 HGB.

Furthermore, the Company's legal representatives are responsible for such internal controls they have deemed necessary in order to enable the preparation of the ESEF documents that are free from any material non-compliance, whether due to fraud or error, with the provisions pursuant to Art. 328 Sec. 1 HGB regarding the electronic reporting format.

The Company's legal representatives are also responsible for submitting the ESEF documents together with the audit certificate and the attached audited annual financial statements and audited management report as well as other documents to be disclosed to the operator of the Federal Gazette.

The Supervisory Board is responsible for monitoring the preparation of the ESEF documents as part of the reporting process.

Auditor's responsibilities for the audit of the ESEF documents

Our objective is to obtain reasonable assurance as to whether the ESEF documents are free from any material non-compliance, whether due to fraud or error, with the requirements pursuant to Art. 328 Sec. 1 HGB. We exercise professional judgment and maintain professional skepticism throughout the entire audit. We also:

- identify and assess the risks of material non-compliance with the requirements pursuant to Art. 328 Sec. 1 HGB, whether due to fraud or error, plan and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinion;
    - obtain an understanding of the internal controls relevant for the audit of the ESEF documents in order to plan audit procedures that are appropriate under the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these controls;
    - assess the technical validity of the ESEF documents, i.e. whether the file containing the ESEF documents complies with the requirements of Delegated Regulation (EU) 2019/815 as amended at the reporting date regarding the technical specification for this file;
    - assess whether the ESEF documents allow a consistent XHTML reproduction of the audited annual financial statements and the audited management report;

Further information pursuant to Article 10 of the EU Audit Regulation

We were elected as auditors by the Annual General Meeting on June 12, 2020. We were engaged by the Supervisory Board on July 27, 2020. We have served as Epigenomics AG's auditors without interruption since the fiscal year 2015.

We declare that the audit opinions contained in this audit certificate are consistent with the additional report to the audit committee pursuant to Article 11 EU Audit Regulation (audit report).

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The auditor responsible for the audit is Andreas Weissinger.

Munich, dated March 12, 2021

Baker Tilly GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft
(Düsseldorf)

Hund
German CPA

Weissinger
German CPA

21. GLOSSARY

ACA	Patient Protection and Affordable Care Act
ACS	American Cancer Society, a nationwide voluntary health organization dedicated to eliminating cancer
ACS Cancer Facts and Figures 2021	ACS, "Cancer Facts & Figures 2021", published in January 2021
ACS Colorectal Cancer Facts and Figures 2020-2022	ACS, "Colorectal Cancer Facts & Figures 2020-2022", published in 2020
ACS Colorectal Cancer Statistics	ACS, "Key Statistics for Colorectal Cancer", revised in January 2021
ACS Liver Cancer Information	ACS, "About Liver Cancer", revised on April 1, 2020 and January 12, 2021
ACS Lung Cancer Statistics	ACS, "Key Statistics for Lung Cancer", revised in January 2021
ADMIT study	Adherence to Minimally Invasive Testing, a study we completed in 2015 to demonstrate the rate of adherence to our Epi proColon product
AEs	Adverse events resulting from the colonoscopy burden associated with each non-invasive CRC screening method
AFP	Alpha-fetoprotein, a widely used diagnostic serum biomarker for liver cancer in cirrhosis patients
Allied Market Research	Allied Market Research, press release "Molecular Diagnostics Market worth $31.8 billion by 2026"
ArbEG	German Act on Employees' Inventions (*Arbeitnehmererfindungsgesetz*)
Ariosa	The Federal Circuit's decision in Ariosa Diagnostics, Inc. v. Sequenom, Inc.
Articles of Association	Articles of Association of the Company
Asia-Pacific 2017 Update	Omata, Masao *et al*., "Asia–Pacific clinical practice guidelines on the management of hepatocellular carcinoma: a 2017 update", published in Hepatol Int (2017) 11, pp. 317–370
Audited Consolidated Financial Statements	The audited consolidated financial statements of the Company as of and for the financial years ended December 31, 2020, 2019 and 2018

Audited Consolidated Financial Statements 2018	the audited consolidated financial statements of Epigenomics AG prepared in accordance with IFRS, as of and for the financial year ended December 31, 2018
Audited Consolidated Financial Statements 2019	the audited consolidated financial statements of Epigenomics AG prepared in accordance with IFRS, as of and for the financial year ended December 31, 2019
Audited Consolidated Financial Statements 2020	The audited consolidated financial statements of Epigenomics AG prepared in accordance with IFRS, as of and for the financial year ended December 31, 2020
Audited Unconsolidated Financial Statements 2020	the audited unconsolidated financial statements of Epigenomics AG for the financial year ended December 31, 2020 prepared in accordance with the German Commercial Code (Handelsgesetzbuch)
Authorization 2020/I	The authority granted to the Executive Board, with the consent of the Supervisory Board, to issue convertible bond until June 11, 2025, in an aggregate nominal amount of up to EUR 150,000,000.00 on terms to the holders or creditors of convertible bonds and/or convertible participation rights for up to a total of 20,564,923 no-par value registered shares of the Company
Authorization 2020/II	The authority granted to the Executive Board, with the consent of the Supervisory Board, to issue convertible bond until March 31, 2021, in an aggregate nominal amount of up to EUR 5,500,000.00 on terms to the holders or creditors of convertible bonds and/or convertible participation rights for up to a total of 5,000,000 no-par value registered shares of the Company
Authorized Capital 2020/I	The capital of the Company that the Executive Board, with the consent of the Supervisory Board, can increase until June 11, 2025 by up to a total of EUR 4,712,984.00 in cash and/or in kind by issuing new registered no-par value registered shares
Authorized Capital 2020/II	The capital of the Company that the Executive Board, with the consent of the Supervisory Board, can increase until June 11, 2025 by up to a total of EUR 18,851,939.00 in return for cash contributions and/or contributions in kind by issuing new no-par value registered shares
Backstop Agreement 2021	The subscription and backstop agreement entered into on June 11, 2021, between the Company and Deutsche Balaton, as amended on August 20, 2021
BaFin	German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungen*), a financial market supervisory and control authority within the framework of the financial sector

Baker Tilly	Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft (formerly: Baker Tilly Roelfs AG Wirtschaftsprüfungsgesellschaft and Baker Tilly AG Wirtschaftsprüfungsgesellschaft), Düsseldorf, Germany
BCC Research	BCC Research, "The Future of Cancer Diagnostics", published in August 2020
BfArM	German Federal Institute for Drugs and Medical Devices (Bundesinstitut für Arzneimittel und Medizinprodukte), a German independent federal agency concerned with authorization, improving the safety of medicinal products, risk identification and assessment of medical devices and monitoring the movement of narcotics and precursors
BioChain	BioChain Institute Inc., Newark, California, United States, providing processed bio-sample products and analysis services used in advancing translational medicine, companion diagnostics, and clinical product research and development
BioChain License Agreement	The exclusive license agreement with BioChain in particular for China, also granting a license to BioChain to develop their own Septin9 IVD product
BIS Research Forecast	BIS Research, "Global In Vitro Diagnostic Market: Focus on Product, Test Type, Application, End User, Region and Competitive Landscape - Analysis and Forecast, 2020-2030", published in July 2020
bisDNA	Sulfonated bisulfite converted DNA
BMC Gastroenterology	Lewin, Jörn et al., "Plasma cell free DNA methylation markers for hepatocellular carcinoma surveillance in patients with cirrhosis: a case control study", published in BMC Gastroenterology (2021) 21:316
Budget Control Act	The Budget Control Act of 2011, as amended
CAGR	Compound annual growth rate
Cash consumption	The sum of cash flow from operating activities, cash flow from investing activities less transactions in securities and calculated as follows
CE marked	The CE mark (CE meaning *conformité européenne*) indicates that the product complies with all the legal requirements for CE marking in the European Economic Area
CEO	Chief Executive Officer
cffDNA	Cell free fetal DNA
cGMP	Current Good Manufacturing Practices, as laid out in the FDA's Quality System Regulation, 21 Code of Federal Regulations 820
CISNET	Cancer Intervention and Surveillance Modeling Network

CISNET Study	Peterse, Elisabeth F. P. et al., "Comparing the cost-effectiveness of innovative colorectal cancer screening tests", published in: Journal of the National Cancer Institute 2020 Aug 6:djaa103
Clearstream	Clearstream Banking Aktiengesellschaft, Mergenthalerallee 61, 65760 Eschborn, Germany, a supplier for post-trading services
Clinical Trials.gov	Certain clinical trials available at https://clinicaltrials.gov/ct2/results?cond=&term=epigenomics%2C+inc.&cntry1=&state1=&recrs= and https://clinicaltrials.gov/ct2/show/NCT01580540
CMS	Centers for Medicare & Medicaid Services, a US federal agency within the US Department of Health & Human Services responsible for administration of several key federal health care programs
CNIPA	China National Intellectual Property Administration
Code of Conduct	Code of Business Conduct and Ethics, which we have adopted to apply to all of our employees and executive officers, as well as to third parties commissioned by employees of Epigenomics
Company	Epigenomics AG
Conditional Capital XI	The conditional increase in the Company's share capital by up to EUR 1,000,000.00 by issuance of up to 1,000,000 new shares, to be implemented to the extent that subscription rights were issued under the SOP 16-18
Conditional Capital XII	The conditional increase in the Company's share capital by up to EUR 1,000,000.00 by issuance of up to 1,000,000 new shares, to be implemented to the extent that subscription rights were issued under the SOP 17-19
Conditional Capital XIII	The conditional increase in the Company's share capital by up to EUR 1,000,000.00 by issuance of up to 1,000,000 new shares, to be implemented to the extent that subscription rights are issued under the SOP 19-21
Conditional Capital XIV	The conditional increase in the Company's share capital by up to EUR 20,564,923.00 by issuance of up to 20,564,923 new shares by granting Shares to the holders or creditors of bonds or participation rights issued through specific methods
Consolidated Financial Statements	Both the Audited Consolidated Financial Statements and the Unaudited Consolidated Interim Financial Statements together
Conversion Period	The first 14 calendar days of each calendar quarter from October 1, 2021 (inclusive) to July 15, 2027 (exclusive)
Conversion Price	The conversion price for the conversion of New Bonds into New Shares

Conversion Rights	The right of holders of the New Bonds to convert each New Bond into New Shares in whole at the conversion price during the Conversion Periods
Convertible Shares	The shares of the Company converted from the New Bonds
Cost-Effectiveness Study	Naber, Steffie K., "Cost-effectiveness of a multitarget stool DNA test for colorectal cancer screening of Medicare beneficiaries", published in: PLoS One. 2019 Sep 4;14(9):e0220234
Cost-Savings Study	Goede, Lucas S. et al., "Cost-savings to Medicare from Pre-Medicare Colorectal Cancer Screening", published in: Med Care. 2015 Jul; 53(7), pp. 630–638
CpG	A region of DNA where a cytosine nucleotide is followed by a guanine nucleotide
CPT	Current Procedural Terminology, a medical code set maintained by the AMA to communicate uniform information about medical services and procedures
CRC	Colorectal cancer
CSO	Chief Scientific Officer
DAB	U.S. Department of Health and Human Services' Departmental Appeals Board
Deloitte 2020 Sector Outlook	Deloitte Touche Tohmatsu Limited, "2021 Global life sciences outlook – Focus and transform | Accelerating change in life sciences"
Deloitte 2021 Global Health Care Outlook	Deloitte Touche Tohmatsu Limited, "2021 global health care outlook – Accelerating industry change"
Deutsche Balaton	Deutsche Balaton Aktiengesellschaft, Heidelberg, Germany
Disbursing Agent	The entity that credits or pays out the investment income
Dividend Paying Agent	The Company itself for shares held in collective custody (*Sammelverwahrung*) by the central securities depository (*Wertpapiersammelbank*) when treated as so-called "*abgesetzte Bestände*" (stock being held separately)
DNA	Deoxyribonucleic Acid
Domestic Paying Agent	A domestic credit or financial services institution, domestic securities trading company or a domestic securities trading bank, including domestic branches of foreign credit institutions or financial service institutions, holding in custody or administering shares
Draft Directive	Proposal for a Council Directive adopted by the EU Commission on February 14, 2013

EASME	EU's Executive Agency for Small and Medium-sized Enterprises
EBIT	Earnings before interest and taxes
EBITDA	EBIT before depreciation and amortization
EBITDA before share-based payment expenses	EBITDA adjusted for the line item share-based payment expenses as shown in note 7 to the consolidated statement of comprehensive income of the Audited Consolidated Financial Statements
EEA	European Economic Area
Engagement Agreement	Engagement agreement regarding the handling of the execution of the Offering and Listing entered into on July 15, 2021 among the Company and the Bank
EPC	European Patent Convention, a multilateral treaty instituting the European Patent Organisation and providing an autonomous legal system according to which European patents are granted
Epi proColon	Our key product, an IVD test to detect the presence of methylated Septin9 in blood plasma, which has been approved by the FDA as a screening test for the detection of colorectal cancer
Epi proLung	An IVD test product to detect the presence of lung cancer in blood plasma based on the SHOX2 and PTGER4 DNA methylation biomarkers
Epigenomics AG	Epigenomics AG, Berlin, Germany, the parent company of the Epigenomics Group, which comprises the Group's central business functions (e.g. accounting, human resources and intellectual property), as well as the Group's R&D activities
Epigenomics Group/Group	Epigenomics AG, together with its consolidated subsidiary Epigenomics, Inc.
Epigenomics, Inc.	Epigenomics, Inc., Federal Way, Washington, United States, our wholly owned subsidiary, which is mainly active in developing our business and commercial activities in North America and in international markets outside of Europe
ESMA Guidelines	European Securities and Markets Authority Guidelines on alternative performance measures of October 5, 2015
EU	The European Union
EU Short Selling Regulation	Regulation (EU) No. 236/2012 of the European Parliament and of the Council of March 14, 2012 on short selling and certain aspects of credit default swaps
EVP Finance	Executive Vice President Finance

Execution Agent	Bankhaus Gebr. Martin AG
Executive Board	The executive board (*Vorstand*) of the Company
Executives	Persons discharging managerial responsibilities as defined in the Market Abuse Regulation
FDA	U.S. Food and Drug Administration, a federal agency of the United States Department of Health and Human Services responsible for protecting and promoting public health through the regulation and supervision of, inter alia, food safety, prescription and over-the-counter pharmaceutical drugs (medications), biopharmaceuticals and medical devices
FDCA	Federal Food, Drug, and Cosmetic Act, passed by U.S. Congress in 1938 giving authority to the FDA to oversee the safety of food, drugs, medical devices, and cosmetics
Financial year 2018/2018	The financial years ended December 31, 2018
Financial year 2019/2019	The financial years ended December 31, 2019
Financial year 2020/2020	The financial years ended December 31, 2020
Financial year 2021/2021	The current financial year 2021 to end on December 31, 2021
FIT	Fecal immunochemical tests
Flat Tax	*Abgeltungssteuer*
FTT	Financial transaction tax
GCP	Good Clinical Practice, a standard for the conduct of clinical studies as set forth in the International Council for Harmonization of Technical Requirements for Pharmaceutical Use in Humans (ICH) harmonized tripartite guideline for good clinical practice E6(R1)
Germany	The Federal Republic of Germany
Globocan 2020	World Health Organization, International Agency for Research on Cancer, "All Cancers Fact Sheet", "Cancer Fact Sheet: Liver", "Population Fact Sheet: China", "Estimated Numbers of Death in 2020, Europe, males" and "Estimated Numbers of Death in 2020, Europe, females" published in December 2020

Governance Code	German Corporate Governance Code (Deutscher Corporate Governance Kodex) which was adopted in February 2002 and last amended on December 16, 2019 by the Government Commission German Corporate Governance Code
GRAIL	GRAIL Inc., Press Releases dated March 30, 2020, December 16, 2020 and June 4, 2021, respectively
Grand View Research 2020	Grand View Research Inc., "Molecular Diagnostics Market Size, Share & Trends Analysis Report By Test Location, By Product (Instruments, Reagents), By Application (Oncology, Infectious Diseases), And Segment Forecasts, 2020 - 2027", published in February 2020, and the report overview at http://web.archive.org/web/20210123051420/https://www.grandviewresearch.com/industry-analysis/molecular-diagnostics-market
Grand View Research 2021	Grand View Research Inc., "Molecular Diagnostics Market Size, Share & Trends Analysis Report By Technology (PCR, INAAT, Sequencing, Mass Spectrometry, TMA), By Product, By Test Location, By Application, By Region, And Segment Forecasts, 2021 - 2028", published in April 2021, and the report overview at https://www.grandviewresearch.com/industry-analysis/molecular-diagnostics-market
Harvard Study	D'Andrea E. et al., "Quantifying the impact of adherence to screening strategies on colorectal cancer incidence and mortality", published in: Cancer Med. 2020 Jan;9(2), pp. 824-836
HCC	Hepatocellular carcinoma
HCC Early-Stage Management	Erstad, Derek J., Tanabe, Kenneth K., "Hepatocellular carcinoma: early-stage management challenges", published in J Hepatocell Carcinoma 2017; issue 4: pp. 81–92
HCCBloodTest	The Company's blood test for the identification of HCC, which is a form of liver cancer
Health Information Technology for Economic and Clinical Health Act	HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009
HIPAA	Health Insurance Portability and Accountability Act
HPV	Human Papilloma Virus
IDE	Investigational device exemption, an exemption allowing the investigational device to be used in a clinical study in order to collect safety and effectiveness data

IFRS	International Financial Reporting Standards, as issued by the International Accounting Standards Board
Information on CRC Screening	Rahul Kumar; Catherine R. Lewis., "Colon Cancer Screening", published July 11, 2020
ISIN	The International Securities Identification Number
ISO	International Organization for Standardization, a worldwide federation of national standards bodies
IVD	In vitro diagnostic, *i.e.*, tests for detecting diseases, conditions, or infections
IVD Directive	The European Union's In-vitro Diagnostic Directive 98/79/EC
IVD Market Research Report	Market Research Report "In-Vitro Diagnostics Market by Product & Service (Instrument, Kits), Technology (Immunoassay, MDx, Hematology, Urinalysis), Application (Diabetes, Oncology, Cardiology, Nephrology, Infectious Diseases) End User (Hospitals) - Global Forecast to 2025" (Description), published in November 2020
IVD Regulation	Regulation (EU) 2017/746 on IVD medical devices, with effect from 26 May 2017
Kalorama Report	Kalorama, Overview of the Report "Molecular Diagnostics Markets in the COVID-19 Era (Markets for COVID-19 IVD Tests, Respiratory Tests, Blood Screening, Cancer Markers and Other IVD Tests)", published on July 9, 2020
KStG	Company's contribution account for tax purposes (*steuerliches Einlagekonto*; § 27 *Körperschaftsteuergesetz*)
LabCorp	Laboratory Corporation of America Holdings, Burlington, North Carolina, United States, an operator of clinical laboratory networks
LabCorp Company Website	Laboratory Corporation of America Holdings, information about the company on its website, available at https://www.labcorp.com/provider-services/hospital-services
Laboratory Customers	Clinical and genetic laboratories
LDCT	Low-dose computed tomography
LDTs	Laboratory-developed tests, a type of IVD test that is designed, manufactured and used within a single laboratory
LEI	Legal Entity Identifier

Life Technologies	Life Technologies AS, Oslo, Norway, a wholly owned subsidiary of Thermo Fischer Scientific Inc., Waltham, Massachusetts, United States
Listing	The Admission to trading of the New Shares on the regulated market (*regulierter Mark*t) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and, simultaneously, to the sub-segment thereof with additional post-admission obligations (Prime Standard)
LTDs	Laboratory-developed tests
MACs	Medicare Administrative Contractors, private health care insurers that act as intermediaries between Medicare and health care providers
Mandatory Convertible Bonds 2021/2024	The subordinated non-interest-bearing mandatory convertible bonds issued by the Company on February 1, 2021, in an aggregate principal amount of EUR 5,500,000.00
Market Abuse Regulation	EU Market Abuse Regulation (EU) No. 596/2014 of April 16, 2014 as amended by Regulations (EU) No. 1011/2016 of June 8, 2016 and 1033/2016 of June 23, 2016
Market Data	Forecasts, statistics, data and other information relating to markets and other industry data on the Company's business and markets included in the Prospectus
MCD	Medicare Coverage Database
MD Regulation	Regulation (EU) 2017/745 of April 5, 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC
MDRs	Medical Device Reports, postmarket surveillance tools of the FDA used to monitor device performance, detect potential device-related safety issues, and contribute to benefit-risk assessments of these products
Medicaid	Medicaid, a social health care program managed by U.S. states and co-funded by the U.S. federal government, providing coverage for persons of all ages with a low income in the United States
Medicare	Medicare, a national social insurance program administered by the U.S. federal government providing health insurance for the elderly (aged 65 and older) and younger people with disabilities
Minimum Holding Period	A continuous period of at least 45 days during the period starting 45 days prior to the date when dividend on a share becomes due and ending 45 days after such date
MPG	German Federal Medical Devices Act (*Medizinproduktegesetz*)

MPV	German Medical Devices Regulation (*Verordnung über Medizinprodukte*)
mSEPT9 Research Paper	Oussalah, Abderrahim et al., "Plasma mSEPT9: A Novel Circulating Cell-free DNA-Based Epigenetic Biomarker to Diagnose Hepatocellular Carcinoma", published in EbioMedicine 30 (2018) 138–147
Myriad	The U.S. Supreme Court's decision in Association for Molecular Pathology v. Myriad Genetics, Inc.
Myriad II	The U.S. Federal Circuit decision in In re BRCA1- and BRCA2-Based Heredity Cancer Test Patent Litigation
NCCN	National Comprehensive Cancer Network
NCD	National coverage determination, a U.S. nationwide determination made by CMS of whether Medicare will pay for an item or service
NCI Lung Screenings	National Cancer Institute, Webpages relating to the National Lung Screening Trial, published in 2002 and last updated November 12, 2014
New Bond	Each of the mandatory convertible bonds in the aggregate principal amount of EUR 16,500,000.00 consisting of 165,000 notes with a nominal amount of EUR 100.00
New Bonds	The mandatory convertible bonds in the aggregate principal amount of EUR 16,500,000.00 consisting of 165,000 notes with a nominal amount of EUR 100.00 each
New Shares	Up to 15,000,000 ordinary registered shares from the Listing with no-par value (*Stückaktien*), each such share representing a notional amount of the Company's issued share capital of EUR 1.00 and with full dividend rights as of the financial year of their issuance and for subsequent financial years, or in the event that such shares are issued prior to the general shareholders' meeting of the Company resolving on the appropriation of the net profits of the preceding financial year, full dividend rights as from the beginning of the financial year preceding their respective issuance
NGS	Next generation sequencing, a technology using bisulfite sequencing methods to analyze one patient sample using multiple biomarkers at the same time
NMPA	National Medical Products Administration (formerly the China Food and Drug Administration), a Chinese public authority responsible for registering and certifying medical devices and instruments, drugs, foods and cosmetic products for the Chinese market, and successor to the China Food and Drug Administration

Offering	The public offering in Germany by the Company of the New Bonds
Opting Partnership	A partnership that has validly exercised its option right to be treated as a corporation for purposes of German income taxation
Oversubscription	Binding purchase orders for further New Bonds exceeding the Subscription Rights of the respective investor
Oversubscription Rights	The right to Oversubscription of the New Bonds
PAMA	U.S. Protecting Access to Medicare Act
Parent-Subsidiary Directive	EC Directive 2011/96/EU of November 30, 2011, as amended
Participating Member States	Austria, Belgium, France, Germany, Greece, Italy, Portugal, Spain, Slovakia, and Slovenia
PCR	Polymerase chain reaction, a technique used in molecular biology to amplify a single copy or a few copies of a piece of DNA across several orders of magnitude, generating thousands to millions of copies of a particular DNA sequence
PEI	Paul-Ehrlich-Institute (*Paul-Ehrlich-Institut*) at Langen (near Frankfurt/Main)
PMA	Pre-market Approval
Polymedco	Polymedco Cancer Diagnostics Products LLC, Cortlandt Manor, New York, United States, a manufacturer, marketer and distributor in the clinical laboratory marketplace
Portfolio Participation	Shareholder holding a direct participation of less than 10.0% in the Company's registered share capital at the beginning of the calendar year
Prometheus	Supreme Court of the United States decision in Mayo Collaborative Services v. Prometheus Laboratories, Inc.
Prospectus	The two prospectuses contained in this document, dated August 24, 2021
Prospectus Regulation	Regulation (EU) 2017/1129
PSPs	Phantom stock programs

PSRs	Phantom stock rights, instruments we have previously awarded to Executive Board members and employees under Phanton Stock Programs, entitling their holders (once certain vesting and waiting periods have passed) to payment in cash of the PSR Premium (*i.e.*, the absolute difference between the current share price of a Share on the exercise date and the exercise price of the PSR)
PTGER4	Prostaglandin E2 receptor 4 gene, a protein-coding gene
Public Comments in the MCD	MCD, Public Comments for Screening for Colorectal Cancer - Blood-Based Biomarker Tests
QALYG	Quality-adjusted life-years gained
QSR	Quality System Regulation of FDA
Qualified Holding	Holding at least 1.0% of the share capital of the Company
R&D	Research and development
Report on Multi-Analyte Blood Test	Cohen, Joshua D. et al., "Detection and localization of surgically resectable cancers with a multi-analyte blood test", published in Science, Vol. 359, Issue 6378, pp. 926-930
Sales Partnership Agreement	The amended and restated joint commercialization agreement between the Company and Polymedco, dated September 28, 2018
SEC	U.S. Securities and Exchange Commission
Securities Act	U.S. Securities Act of 1933, as amended
Sentinel	Sentinel CH. SpA., Milan, Italy, an R&D provider and manufacturer of IVD products
Septin9	A gene providing instructions for making a protein called septin9, the DNA methylation status of which is considered an indicator for the presence of colon cancer
Shares	All shares of the Company including the New Shares, being no-par value ordinary registered shares, each such share representing a notional amount of the Company's issued share capital of EUR 1.00
SHOX2	Short Stature Homeobox 2, a member of the homeobox family of genes that encode proteins
Bank	mwb fairtrade Wertpapierhandelsbank AG, Rottenbucher Str. 28, 82166 Gräfelfing, Germany
SOP 16-18	The authority of the Executive and Supervisory Boards to issue up to 1,000,000 stock options until April 30, 2018, each entitling the beneficiary to subscribe for one Share, subject to certain adjustments, to be issued from the Conditional Capital XI

SOP 17-19	The authority of the Executive and Supervisory Boards to issue up to 1,000,000 stock options until May 31, 2019, each entitling the beneficiary to subscribe for one Share, subject to certain adjustments, to be issued from the Conditional Capital XII
SOP 19-21	The authority of the Executive and Supervisory Boards to issue up to 1,000,000 stock options until May 31, 2021, each entitling the beneficiary to subscribe for one Share, subject to certain adjustments, to be issued from the Conditional Capital XIII
StGB	German Criminal Code (*Strafgesetzbuch*)
Study on COVID-19, Cancer Care and Prevention	Dubois, Raymond N, "COVID-19, Cancer Care and Prevention", published in September 2020
Study on the Impact of COVID-19 on Cancer Care	Patt, Debra et al., "Impact of COVID-19 on Cancer Care: How the Pandemic Is Delaying Cancer Diagnosis and Treatment for American Seniors", published in November 2020
Subscription Agreement	The subscription agreement entered into August 23, 2021 among the Company and the Bank
Subscription Offer	The offering of the New Bonds in a public offering to the Company's shareholders in connection with an indirect subscription right (*mittelbares Bezugsrecht*)
Subscription Period	The period during which Subscription Rights may be exercised, from August 27, 2021 to September 10, 2021
Subscription Price	The subscription price for the New Bonds
Subscription Ratio	The ratio at which New Bonds will be offered to the existing shareholders of the Company against contributions in cash
Subscription Rights	The subscription rights to the New Bonds
Supervisory Board	The supervisory board (*Aufsichtsrat*) of the Company
Total liquidity	The sum of "cash and cash equivalents" and "marketable securities", each as shown in the consolidated balance sheet of the Audited Consolidated Financial Statements
U.S. Census Data	U.S. Census data for 2020 on age and sex composition
U.S./United States	The United States of America
Unaudited Consolidated Interim Financial Statements	The unaudited consolidated interim financial statements of Epigenomics AG prepared in accordance with International Accounting Standard 34: Interim Financial Reporting (IAS34), as of and for the six-month period ended June 30, 2021

United Kingdom	United Kingdom of Great Britain and Northern Ireland
USC	University of Southern California, Los Angeles, California, United States
USPSTF	United States Preventive Services Task Force, an independent panel of primary care physicians and epidemiologists specializing in primary care and prevention, which is staffed and funded by the U.S. Department of Health and Human Services' Agency for Healthcare Research and Quality
USPSTF Recommendation Summaries	USPSTF Recommendations, available at https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/colorectal-cancer-screening3 and https://www.uspreventiveservicestaskforce.org/uspstf/draft-update-summary/lung-cancer-screening1
USPSTF Statements	USPSTF, Final Recommendation Statement Lung Cancer: Screening
USPTO	United States Patent and Trademark Office, an agency in the U.S. Department of Commerce that issues patents to inventors and businesses for their inventions and registered trademarks for product and intellectual property identification
We, our, us	The Epigenomics Group
Weizhen	Jiangsu Weizhen Biomedical Technology, Inc.
WGO Study	Sarin S.K.; Maiwall, Rakhi, "Global Burden Of Liver Disease: A True Burden on Health Sciences and Economies!!"
WpHG	German Securities Trading Act (Wertpapierhandelsgesetz)

22. RECENT DEVELOPMENTS AND OUTLOOK

22.1. Recent Developments

In the second conversion window for the Mandatory Convertible Bonds 2021/2024 during the first 14 days of July 2021, Mandatory Convertible Bonds 2021/2024 in a nominal amount of EUR 440,682.00 were converted into 409,076 Shares, increasing the share capital of the Company by EUR 409,076.00 from EUR 11,823,227.00 to EUR 12,232,303.00.

On July 2, 2021, in order to facilitate the Offering, the Company paid a commission in the amount of EUR 635,250.00 to Deutsche Balaton under the Backstop Agreement 2021 a portion of which in the amount of EUR 57,750.00 is to be refunded pursuant to the amendment of August 20, 2021 (see *11.2.2. "Material Agreements — The New Bonds — Backstop Agreement with Deutsche Balaton in 2021"*).

On August 17, 2021, the Company, as seller, entered into a sale and transfer agreement with New Horizon Health Limited, as purchaser, for the sale of a number of the Company's non-essential blood samples for an aggregate purchase price of USD 6.7 million (subject to certain adjustments), of which an amount of USD 4.7 million was immediately payable upon signing and has been paid as of the date of the Prospectus (see *11.6. "Material Agreements — Blood Sample Sale Agreement"*).

22.2. Outlook

COVID-19 has negatively affected segments of the global economy, disrupted global supply chains, as well as created significant volatility and disruption of financial markets, and in turn has had negative effects on our industry. Even though those effects have receded over the course of 2021, at least for a substantial part of the remainder of 2021, we assume that COVID-19, associated containment measures and their after effects, in particular in the United States, will continue to have negative effects on our business operations.

As we publicly announced, we are currently examining various strategic options as, due to the negative reimbursement decision for Epi proColon by CMS in January 2021, our ability to successfully commercialize Epi proColon in the short to medium term is substantially limited. In particular, in the next months, we plan to meet with CMS' leadership which has been newly appointed since the negative reimbursement decision.

For the financial year 2021, based on certain factors, assumptions and associated uncertainties, we expect that our revenue will be approximately EUR 6.0 million. Derived therefrom, we expect that our EBITDA before share-based payment expenses for the financial year 2021 will be in a range between EUR (3.0) million and EUR (4.0) million. For additional information and especially the underlying factors, assumptions and associated uncertainties, see *8. "Profit Forecast"*.

Based on our business plans for 2021, we expect our cash consumption to be in in a range between EUR 3.5 million and EUR 4.5 million in the same year. The planned cash expenditures for 2021 are connected with our ongoing R&D activities, as well as administrative tasks and obligations. Where R&D is concerned, our post-approval study in the United States is expected to remain a material factor to the extent that COVID-19 allows such activities to resume.

Certain statements in this section, including, in particular the expectations described above, constitute forward-looking statements. These forward-looking statements are not guarantees of future financial performance, and our actual results could differ materially from those expressed or implied by these forward-looking statements as a result of many factors, including but not limited to

those described under *2.3. "General Information — Forward-Looking Statements"* and *1. "Risk Factors"*.