epigenomics

ANNUAL REPORT 2018

2018

DETECTING CANCER IN BLOOD

CONTENTS

FOREWORD
BY THE
EXECUTIVE BOARD

DEAR SHAREHOLDERS,

The inclusion of the Epi proColon blood test in the Centers for Medicare & Medicaid Services (CMS) 2019 Clinical Laboratory Fee Schedule (2019 CLFS) in December 2018 was a milestone in the Company's history. With the final reimbursement rate of USD 192.00 per test, an increase of 130% over the CMS rate originally published in 2017, an important hurdle was accomplished on the road to reimbursement by CMS.

➛ **REIMBURSEMENT FOR EPI PROCOLON** Medicare coverage will remain our most important goal in 2019. We are approaching this goal through both paths: legislation and a National Coverage Determination (NCD).

Bipartisan legislation for the reimbursement of FDA-approved blood-based colorectal cancer screening tests, has been introduced in both the Senate and the House of Representatives. Currently, Epi proColon is the only test that meets these requirements. Once the bill is ready to be introduced for vote, the Congressional Budget Office score will be incorporated into the process. Given the strong bipartisan support, we are optimistic that the legislation has a realistic chance for passage in 2019.

Simultaneously, we are pressing ahead with a Medicare National Coverage Determination (NCD). After we suffered a setback in May 2018, because the American Cancer Society (ACS) did not include Epi proColon in its updated colorectal cancer screening guidelines, we announced positive results from a microsimulation model in early January 2019. The positive results are crucial as many of the key guideline groups, whose opinions are highly valued by CMS, utilize these models to evaluate the effectiveness of the test. Once the model is published, we can work with the relevant clinical groups to include Epi proColon in the guidelines, which in turn will positively impact CMS's decision for an NCD.

As you can see, there are more important milestones to come in 2019 and we are doing everything we can to achieve Medicare coverage as quickly as possible.

➛ **INNOVATIVE LIVER CANCER TEST: THE HCCBLOODTEST** In addition to our activities related to Epi proColon, we were also successful in the past fiscal year with our second promising liquid biopsy test. In October 2018, two months earlier than expected, we received CE marking for our HCCBloodTest, a blood test for the detection of liver cancer in patients with cirrhosis. In a previously published clinical study the blood test showed a high sensitivity of 90.6% with a specificity of 87.2% in the detection of liver cancer. Furthermore, the test showed a higher diagnostic accuracy than alpha-fetoprotein test currently used in conjunction with ultrasound. As a result, we started a cross-sectional clinical study in January 2019 in the United States. Key findings from this study will bridge to a prospective longitudinal study for FDA submission in the second half of the year.

According to the World Health Organization (WHO), liver cancer is the second most common cause of death from cancer worldwide. A major risk factor for the development of liver cancer is liver cirrhosis. We estimate the liver cirrhosis surveillance market to be in excess of 10 million tests per year making it more than a EUR 3 billion market opportunity globally.

➛ **SOLID FINANCIAL SITUATION** With a liquidity of EUR 17.1 million as of December 31, 2018, we had a solid financial buffer to start the new fiscal year. The capital increase successfully completed in October 2018, which generated gross proceeds of around EUR 22.3 million, signaled strong support from current and new investors. Some renowned U.S. healthcare funds were among the institutional investors who participated in the capital increase. We regard the interest of these qualified investors as trust in our work and share the confidence that 2019 could be a turning point in Epigenomics' history.

Greg Hamilton, CEO

Jorge Garces, CSO

Albert Weber, EVP Finance

➛ **LOOKING AHEAD** Key milestones await us in the new financial year which, when reached, will herald a new phase in Epigenomics' corporate development. The passing of the colorectal cancer screening bill or the inclusion of Epi proColon in clinical guidelines and subsequent NCD will drive sales growth in the United States, our largest market. We, as the Company's Executive Board members will spare no effort ensuring that we reach them.

We look forward to being able to keep you informed about our progress in developing and marketing innovative diagnostic products. We also wish to take this opportunity to thank our employees for their continued dedication and hard work, our customers and partners for their loyalty and you, our shareholders, for your ongoing support and trust.

Yours sincerely

Greg Hamilton
(Chief Executive Officer)

Jorge Garces
(Chief Scientific Officer)

Albert Weber
(Executive Vice President Finance)

REPORT OF THE SUPERVISORY BOARD

DEAR SHAREHOLDERS,

In 2018, further key steps were taken to get Epi proColon approved for reimbursement. The reimbursement amount is at the higher end of our envisaged range. By ensuring the financial security of the Company, we reached yet another important milestone, paving the way to prepare the liver cancer test for approval in other parts of the world (U.S.A., China). The financing round also brought the Company to the attention of institutional investors in the U.S.A..

WORK OF THE SUPERVISORY BOARD

Throughout 2018, the Supervisory Board of Epigenomics AG fulfilled all of the duties incumbent upon it in accordance with the law, the Articles of Association and its Rules of Procedure. It advised and monitored the Executive Board in managing the Company and kept itself appraised at all times of the Company's operating performance, the key challenges it faced, and the Executive Board's assessment as to the overall financial position and risk management of the Company. All corporate planning, including financial, capital expenditure and human resources planning, as well as general business performance was reported on a regular basis by the Executive Board. To the extent that German corporate law or the applicable Rules of Procedure required consent for certain decisions or actions by the Executive Board, such consent was granted by the Supervisory Board after thorough deliberation and careful examination of oral reports and written documentation, which were provided.

The reimbursement of Epi proColon in the U.S. was one of the most important issues discussed regularly at Supervisory Board meetings in fiscal year 2018. Further important topics included the capital increase through the issue of subscription rights in October, the overall financial situation of the Company, strategic options and legal issues. Furthermore, we reviewed and discussed potential business transactions on a case-by-case basis where the terms and conditions of existing or pending cooperation agreements were strategic in nature.

Heino von Prondzynski, Chairman of the Supervisory Board

The Supervisory Board adopted the annual financial statements for fiscal year 2018 and approved the consolidated financial statements. The Supervisory Board always took into account in its work the interests of Epigenomics' shareholders.

During 2018, six meetings of the Supervisory Board with the Company's Executive Board took place on January 22/23, March 22, May 29/30, July 9/10, September 25/26 and December 3/4. These meetings were held in Berlin. All members of the Supervisory Board attended all of the meetings.

In addition to the very close dialog between all members of the Supervisory and the Executive Board in joint plenary meetings, detailed written and oral reports of the Executive Board were provided to the Supervisory Board within the framework of supplementary conference calls and individual discussions. Thus, the Supervisory Board was continually kept up to date on the Company's current business situation and key events throughout the year.

At its meeting on December 3/4, 2018, the Supervisory Board considered in detail the operational budget, financial planning and human resource allocation plan for the fiscal year 2018 and approved the Company's targets for 2019.

It also approved the Executive Board's remuneration.

For each formal meeting of the Supervisory Board, in the presence of the Executive Board, all members of the Supervisory Board received comprehensive written reports in advance, prepared by the Executive Board with the input of the respective managers of the Company. These detailed documents were suitable for analyzing and discussing all relevant topics of the respective agenda of the Supervisory Board meetings and for adopting all required resolutions. Written minutes of all official meetings and telephone conferences were prepared. Whenever necessary, resolutions were also passed by written vote in accordance with the Company's Articles of Association.

ORGANIZATIONAL CHANGES IN 2018

In the previous year, Mr. Albert Weber was appointed to the Executive Board of Epigenomics AG with effect from January 1, 2018. Dr. Uwe Staub stepped down from the Company's Executive Board on March 31, 2018.

CONFLICTS OF INTEREST

No conflicts of interest for the members of the Supervisory Board arose during the reporting year.

COMMITTEES

The Supervisory Board established an Audit Committee chaired by Prof. Günther Reiter, who was nominated as the main expert for financial reporting and audit matters in accordance with section 100 of the German Stock Corporation Act (Aktiengesetz – AktG). In this role, he is responsible for communicating regularly with the Executive Board, the Senior Manager Controlling and with the auditor of the Company, in order to provide advice on the preparation of financial reports, audits and quarterly financial statements. He reports regularly to the full Supervisory Board, highlighting any findings and observations in this area. At the same time, the Supervisory Board designated Dr. Ann Clare Kessler, as the main expert on remuneration and nomination matters. Heino von Prondzynski was designated the main expert on corporate governance matters.

CORPORATE GOVERNANCE

The Supervisory Board continuously reviewed all issues of legal and regulatory compliance by the Company. Given the rapidly and constantly changing economic environment and in light of the current financial position of the Company, the Supervisory Board also discussed in detail issues relevant to an effective risk management system. Both the Executive Board and the Supervisory Board regard the commitment to sound corporate governance as crucial to reinforcing the Company's credibility with current and future shareholders, business partners and employees. In October 2018, the Executive Board and the Supervisory Board published an update of the October 2017 Declaration of Compliance with the German Corporate Governance Code (the "Code") pursuant to section 161 AktG, which is included in this annual report and is also permanently available on Epigenomics' website (*www.epigenomics.com/news-investors/corporate-governance*).

In its declaration, the Company has committed itself to adherence to the Code, and only deviates in explicitly mentioned, Company-specific cases from its recommendations.

In accordance with section 111 (5) AktG, the Supervisory Board has set a quota for female board members equal to 1/3 of the number of seats on the Supervisory Board. The number of female board members was two and therefore above the quota.

AUDIT OF THE ANNUAL FINANCIAL STATEMENTS

The audit firm Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft (Baker Tilly), Düsseldorf, audited the annual financial statements and the corresponding management report of Epigenomics AG for fiscal year 2018, which were prepared in accordance with the principles of German commercial law, as well as the consolidated financial statements and the Group management report for fiscal year 2018, which were prepared in accordance with International Financial Reporting Standards (IFRSs), as adopted by the European Union (EU).

Baker Tilly did not raise any objections in relation to either the annual or consolidated financial statements and issued an unqualified audit opinion for each.

The consolidated financial statements and the Group management report were prepared in accordance with section 315e HGB in accordance with International Financial Reporting Standards (IFRSs), as adopted by the EU. Baker Tilly's audit was conducted in accordance with German generally accepted standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany ("Institut der Wirtschaftsprüfer in Deutschland e. V."). The audit reports and the audit opinions were submitted to the Supervisory Board by the Executive Board in a timely manner.

Baker Tilly's audit reports were presented to all members of the Supervisory Board and were discussed in depth at the meeting on March 26, 2019, in the presence of the auditor, who reported on the main findings of its audit. At this meeting, the Executive Board presented the 2018 annual financial statements and 2018 consolidated financial statements, as well as the Company's early risk identification system. Baker Tilly also provided a report on the scope, focal points and findings of the audit. As a result of its own observations and examinations, the Supervisory Board raised no objections, accepted and confirmed the findings of the audit. The Supervisory Board, in the presence of the auditor, formally approved the annual financial statements and the consolidated financial statements as of December 31, 2018, without raising any objections or making any amendments. By the Supervisory Board's approval, the 2018 annual financial statements of Epigenomics AG are thus adopted as submitted in accordance with section 172 AktG.

With respect to the Company's existing internal control and early risk identification system, the auditor stated to the Supervisory Board that in its opinion these systems are suitable to meet all legally intended requirements.

The Supervisory Board would like to thank the Executive Board, the senior management and all employees of Epigenomics for their commitment and dedication throughout fiscal year 2018.

Berlin, March 2019

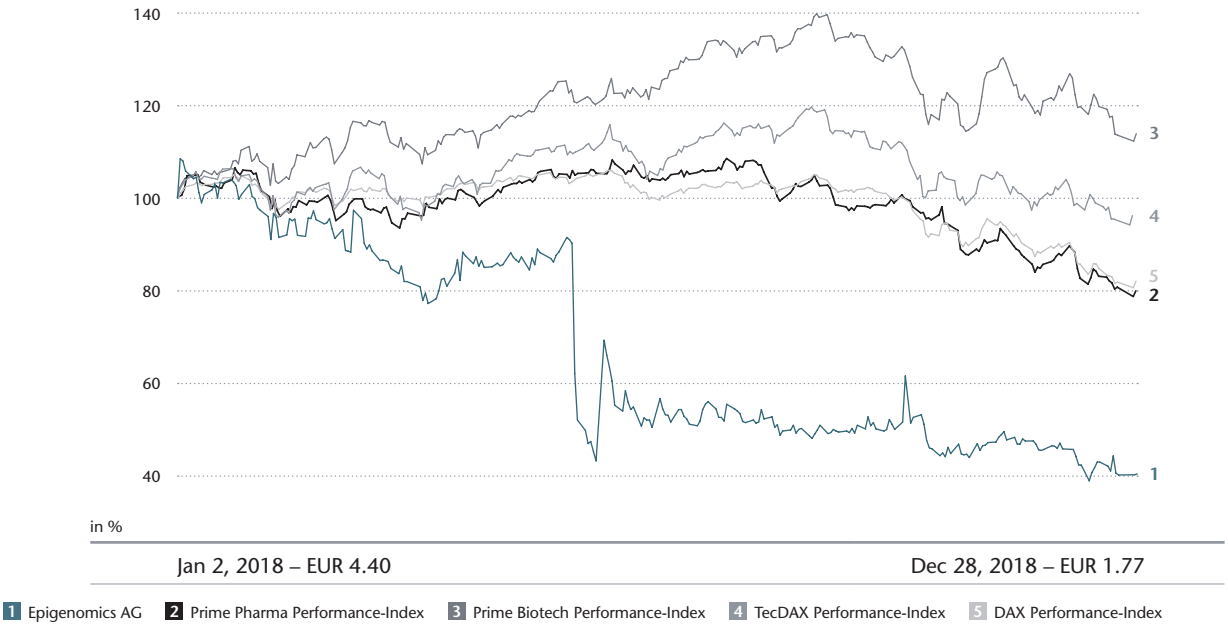
On behalf of the Supervisory Board

Heino von Prondzynski

OUR STOCK

OUTSTANDING REIMBURSEMENT DECISION IN THE U.S.A. INFLUENCES SHARE PRICE PERFORMANCE

SHARE PRICE PERFORMANCE IN 2018



Epigenomics' share price peaked at EUR 4.77 (Xetra) on January 3, 2018. However, as the year progressed the share price was heavily influenced by the American Cancer Society's (ACS) decision to not include Epi proColon in the current colorectal cancer screening guidelines as well as the reimbursement decision that was still pending in the U.S.A.. After the Company announced the ACS's decision on May 30, 2018, the share price took a significant hit, falling to below EUR 2.00. Epigenomics' share price rebounded to EUR 3.04 on June 11, 2018 after the Centers for Medicare & Medicaid Services (CMS) announced the preliminary fee of USD 192.00, before losing significant ground over the course of the next months and bottoming out at EUR 1.70 on December 10, 2019. The shares closed out 2018 at EUR 1.77, down 59.8%. The 2018 average daily Xetra trading volume was about 45,000 shares.

CHANGES IN THE SHARE CAPITAL/CORPORATE ACTIONS

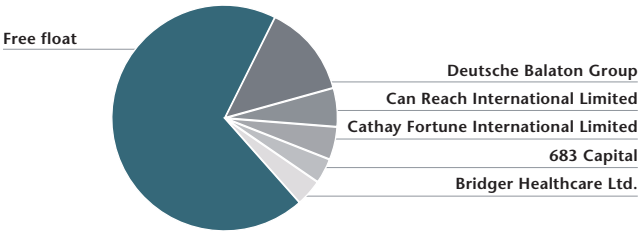
The issue of 12,007,180 shares in connection with the October 2018 capital increase against cash and, in part, in-kind contributions with shareholders' subscription rights increased the number of outstanding Epigenomics shares in fiscal year 2018 to 36,021,540 on December 31, 2018. The market capitalization amounted to around EUR 64 million at the end of 2018.

The gross proceeds from the capital increase amounted to approximately EUR 22.3 million. Of this amount, the Company collected roughly EUR 21.2 million in cash. Moreover, the Company's liabilities from the convertible notes issued to Cathay Fortune International Company Limited (CFIC) decreased by approximately EUR 1.1 million from EUR 7.1 million to EUR 6.0 million, since CFIC had contributed notes amounting to EUR 1.1 million to the capital increase as contributions in kind.

SHAREHOLDER STRUCTURE ON JANUARY 23, 2019

On January 23, 2019 the following shareholders held more than 3% each of Epigenomics AG.

Shareholders	Voting rights[1]
Deutsche Balaton Group	13.57%
Can Reach International Limited	5.53%
Cathay Fortune International Limited	4.84%
683 Capital	3.75%
Bridger Healthcare Ltd.	3.75%



Just under 70% of the Epigenomics shares are in free float. The largest proportion is held by private investors. Recent voting rights notifications are available on Epigenomics' website under "News & Investors".

[1] *According to published voting rights notifications*

Key data on Epigenomics' shares

ISIN	DE000A11QW50
Security code number	A11QW5
Ticker symbol	ECX
Stock exchange	Frankfurt Stock Exchange Regulated Market (Prime Standard)
Issued shares (December 31, 2018)	36,021,540
Free float (January 23, 2019)	68.56%
Market capitalization (December 31, 2018)	EUR 63.8 million
Year-end closing price	EUR 1.77

TRANSPARENT DIALOG WITH SHAREHOLDERS

Epigenomics maintains ongoing and active dialog with the capital market. Throughout 2018, the Company hosted regular conference calls for investors and analysts to discuss the financial results and provide updates on developments within the Company. Epigenomics' Executive Board also presented at multiple investor meetings.

At the Company's Annual General Shareholders' Meeting in Berlin on May 30, 2018, the shareholders voted in favor of all of the Company's proposals by a large majority.

ANALYST COVERAGE AND ADR PROGRAM

In 2018, the analysts of First Berlin Equity Research GmbH, goetzpartners securities Limited and Pareto Securities AS (formerly equinet Bank AG) followed the performance of Epigenomics' shares and regularly published their appraisals and recommendations.

Epigenomics' ADRs are traded on the OTCQX International market in the United States, a segment reserved for high-quality non-U.S. companies. These ADRs are tradable U.S. dollar-denominated certificates representing ordinary shares of the Company at a ratio of five ordinary shares to one Epigenomics ADR. Bank of New York Mellon acts as the Company's "Principal American Liaison" (PAL) on OTCQX and is responsible for providing professional guidance on OTCQX requirements.

Epigenomics AG – ADR	OTCQX Trading
Structure	Sponsored Level 1 ADR
Ratio	1 ADR = 5 shares
Ticker symbol	EPGNY
CUSIP	29428N102
ISIN	US29428N1028
Depositary bank/PAL	BNY Mellon

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GROUP MANAGEMENT REPORT

ORGANIZATION, BUSINESS ACTIVITIES AND STRATEGY

GROUP STRUCTURE, BUSINESS ACTIVITIES AND PRODUCTS

Epigenomics AG is headquartered in Berlin, Germany, and operates a wholly owned subsidiary in the U.S.A., Epigenomics, Inc., which is registered in Seattle, WA and primarily operates in San Diego, CA. Our business activities consist primarily of targeting the important international markets of North America, Asia and Europe. Epigenomics AG, the parent company, oversees the Group's central business functions (e.g., accounting, human resources and intellectual property). The Group's research and development (R&D) activities are also conducted from Berlin. Epigenomics, Inc. is primarily active in commercializing our products in North America, as well as establishing and further developing our business relationships in the international markets outside of Europe.

We are a molecular diagnostics company focusing on developing and commercializing in vitro diagnostic (IVD) liquid biopsy tests for the screening, early detection and diagnosis of cancer. We develop our products based on a unique and proprietary technology platform using DNA methylation. Our research and development (R&D) activities are aimed at identifying suitable biomarkers in human tissue and developing and patenting the corresponding IVD tests.

We are currently developing and commercializing IVD tests for colorectal cancer (CRC), liver cancer and lung cancer. Our cancer molecular diagnostic products address a significant but largely unmet medical need, providing patients and physicians with the benefits of more user-friendly, superior diagnostic tests.

Our lead product – Epi proColon – is a blood-based test for the early detection of CRC using our proprietary DNA methylation biomarker Septin9. The test is CE-marked and has been on the European market in its current version since 2012. In April 2016, the U.S. Food and Drug Administration (FDA) approved Epi proColon as the first and, thus far, only blood-based CRC screening test for commercialization on the U.S. market. Epi proColon was also approved for commercialization in China by the China Food and Drug Administration (CFDA) at the end of 2014.

In 2017 we received CE certification for our second product, Epi proLung, a test used to screen for lung cancer, thus completing its development. The product is a reflex test that is aimed at clarifying indeterminate results with the aim of enabling earlier identification of illness, improving the outcome of therapy, and lowering costs of treatment.

In the reporting year, our HCCBloodTest was the latest product in our portfolio to receive the CE mark, thereby making it ready for commercialization in Europe. The blood test is used to detect liver cancer in patients with cirrhosis of the liver. The next objective for the test will be to receive market approval from health authorities in the U.S.A. and China.

We also celebrated 20 years in business in November 2018.

CORPORATE STRATEGY AND GOALS

Epigenomics AG's primary corporate objective is to develop and commercialize in vitro diagnostic products for detecting cancer. We take a goal-oriented approach to managing and monitoring operational progress when executing our strategy. The Supervisory Board and the Executive Board of the Company regularly define milestones and deliverables including revenue, operating result and business targets as well as product development, clinical and regulatory milestones against which performance of the Company and its employees is regularly monitored.

Our corporate strategy in the midterm is to become the global leader in the market for diagnostic tests based on liquid biopsies. With the first ever FDA-approved blood test for cancer screening, we have established Epigenomics as a pioneer in this fast-growing market. Based on a solid level of patent protection in DNA methylation, we intend to drive market adoption for Epi proColon and expand our product pipeline in the long term. With the successfully completed development of Epi proLung and the HCCBloodTest, our expertise was again on full display in the past two years.

To execute our strategy we are committed to taking all the appropriate steps necessary for product development and global commercialization. Our products are marketed through our own commercialization activities as well as through distribution partners. We primarily target the economically lucrative markets of North America, Asia and Europe with the aim of exhausting their revenue potential mostly through product sales and licensing.

Our commercial strategy is initially focused on the United States, as this is where we see the greatest economic opportunities for our products. The U.S.A. is a key market as new diagnostic technology is typically adopted there first.

Since the FDA's market approval for Epi proColon in the U.S.A., we have been devoting special attention to reimbursement, i.e., to convincing the payors in the U.S. healthcare system to reimburse their patients the cost of carrying out the test. Securing reimbursement is a key condition for commercial success in the U.S.A..

China also offers significant long-term potential for the commercialization of blood-based tests. However, the Chinese market is both enormous and complex, and presents challenges – some hardly surmountable – to a smaller company such as Epigenomics when it comes to independent marketing activities. Consequently, we have opted for a partner strategy to market our products there.

In Europe and other parts of the world we market our own products in selected markets like Germany, France, and Spain and use a network of distributors and commercialization partners in other major markets.

MANAGEMENT

Epigenomics is managed by a team comprised of industry experts with long-standing experience in the diagnostics industry, extensive scientific and management expertise, and the unequivocal commitment to building a world-leading cancer molecular diagnostics company.

As a stock corporation under German law, the Company is led by an experienced Executive Board under the oversight of a Supervisory Board elected by our shareholders. Greg Hamilton has been Chief Executive Officer (CEO) since July 2016. He has over 20 years of management experience in the molecular diagnostics, manufacturing and professional services industries. 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. He has been responsible for multiple FDA-approved products including a human papilloma virus (HPV) high risk screening assay and the first-ever approved HPV genotyping assay.

Jorge Garces, Ph.D. was appointed to the Executive Board of Epigenomics AG in December 2017 and serves as President and Chief Scientific Officer (CSO). Mr. Garces, Ph.D. oversees operations, research and development, clinical affairs, regulatory and quality. Mr. Garces has over 20 years of management experience at well-known companies in the molecular diagnostics and life sciences industries, and was CEO and President of AltheaDx Inc. and Enigma Diagnostics, Inc. Prior to that, he was Vice President and Operations Manager at Hologic, Inc., where he oversaw the development and FDA approval of tests for cystic fibrosis and HPV.

Albert Weber was appointed to the Company's Executive Board at the start of the year and holds the position of Executive Vice President (EVP) Finance. Mr. Weber has overall responsibility for finance, human resources and IT. Prior to this appointment, Mr. Weber spent 17 years as the Senior Vice President of Finance, Accounting and Controlling for Epigenomics. Before joining the Company he held various management functions in controlling and accounting in the IT and music industries. He has comprehensive experience across all corporate finance functions, as well as in a range of corporate actions and IPOs in particular.

The Executive Board was complemented in the reporting year by Dr. Uwe Staub, who had been the Company's Chief Operating Officer (COO) since April 2013. Dr. Staub stepped down from the Executive Board with effect as of March 31, 2018.

The Supervisory Board of Epigenomics comprises four members with the required industry experience and expertise. For further details on the current members of the Executive and Supervisory Boards, please see the Corporate Governance section of this management report.

PERFORMANCE INDICATORS

Epigenomics' goal is to increase shareholder value by systematically pursuing our mission and strategy. We use financial and non-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 key financial figures which are well established and recognized by the international investor community. These include revenue, gross margin, EBIT, EBITDA adjusted for share-based payments, the operating result, and earnings per share. Revenue and EBITDA before share-based payment expenses are our key indicators with regard to managing the Company and, therefore, our financial market reporting.

The aforementioned indicators are monitored closely on a monthly basis and published on a quarterly basis in our mandatory and voluntary financial reports. They are regularly compared against planned and forecast values, and against external benchmarks where appropriate. 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 non-financial performance indicators important for our business primarily relate to our R&D and commercial activities. This set of indicators includes 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, and 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.

ECONOMIC ENVIRONMENT IN 2018 AND OUTLOOK FOR 2019

MACROECONOMIC ENVIRONMENT IN 2018

2018 saw no noticeable letup in the complex geopolitical situation, or in the ongoing crises around the world. Globally, nationalism and confrontation were on the rise against the backdrop of waning cooperation. In addition to the threat of trade disputes between the three economic powerhouses, the U.S.A., Europe and China – with individual measures having already been implemented and carried out, the political and economic relations between European countries also deteriorated. While the focus remained solidly on U.S. policies under Donald Trump, the stalling Brexit negotiations between the UK and the European Union (EU) continued to grab economic headlines in 2018.

In Germany, a new government coalition finally got to work in March 2018, six months after the parliamentary elections in 2017. The outcome at the end of lengthy negotiations was a repeat of the previous grand coalition between the CDU/CSU and SPD, which had long been considered out of the question. Economic news focused on the automotive industry, which was hit by fresh scandals in 2018 after failing to come away unscathed from those of previous years. Deutsche Bank continued to lose some of its former economic might and standing, and rather than reclaiming its status as a global player ran the risk of becoming a troubled bank.

In the UK, Brexit naturally dominated the political headlines. The country is divided and in a state of virtual political incapacity, while a growing number of multinationals (primarily financial service providers) are relocating jobs. Some are even moving their entire European headquarters to the continent or have announced plans to do so. They include banking heavyweights such as Goldman Sachs, UBS and Morgan Stanley (moving to Frankfurt am Main) as well as major investment firms such as M&G, Columbia Threadneedle and First State (moving to Luxembourg and Ireland).

France caught the world's attention in the reporting period after structural reforms announced by President Macron led to weeks of major demonstrations and protests throughout the country, some even resulting in violent clashes (gilets jaunes (yellow vests) movement). Thereby, Macron's opponents have forced him to concede some of his intended reforms.

Beyond Europe, attention was focused in particular on the U.S.A. and China. President Trump, in his second year in office, has been the source of many domestic and foreign policy conflicts. As they had hoped, his opponents were successful in weakening him politically at the midterm elections in November 2018, when the governing Republicans lost their majority in the House of Representatives to the Democrats. The latter are now able to obstruct or even prevent key legislation planned by the Trump administration and were swift to leverage their power by withholding funds for the construction of Trump's wall along the Mexican border. This resulted in a government shutdown at the end of 2018, which lasted well into the new year. On the economy, however, Trump's domestic approval ratings are by no means poor. His bearing on the international stage and willingness to confront China have received strong support in some cases, even with his political opponents.

In the trade dispute with China, Trump and Chinese President Xi Jinping declared a "ceasefire" on the margins of the G20 Summit in December 2018, thereby giving Xi some necessary breathing room after his country's economy had weakened somewhat in 2018, a fact that was causing growing concern abroad. China's industrial and retail sectors in particular reported weak, disappointing data. Auto sales in the world's second-largest economy recorded their first decline in 20 years, falling by almost 6% year on year.

Overall global economic growth in 2018 was more or less in line with economists' predictions. In its November 2018 Economic Outlook, the Organisation for Economic Co-operation and Development (OECD) forecast global real gross domestic product (GDP) growth of approximately 3.7%, the same level anticipated by economists at the International Monetary Fund (IMF). The OECD, however, observed a slowdown in global growth and believes that the summit has been passed.

China and India remained the driving forces behind the global economy in 2018 with estimated GDP growth of 6.6% and 7.5%, respectively. The 2018 growth rates forecast in the fall of 2017 were rather modest at 1.9% for the eurozone (1.6% for Germany), while a figure of 2.9% was still expected for the U.S.A.. Following an extremely weak fourth quarter of 2018 on the global capital markets as well as the growing issues surrounding Brexit, the 2018 forecasts referred to above were again revised downward at the start of the following year, in some cases significantly.

While the labor market data and rates of inflation in the key economies remained encouraging, the OECD report cites the consequences of international trade disputes as having an increasingly notable impact. Weak currencies and outflows of capital were also increasingly cause for concern in some emerging markets. In Europe, Brexit is proving extremely damaging and the banking crisis is far from over.

Economic development in the U.S.A. significantly outpaced that of Europe in 2018. The U.S. economy saw strong growth, particularly in the first half of 2018, and unemployment at the end of the year had sunk to its lowest level in 40 years. The tax cuts pushed through by the Trump administration in the previous year were clearly proving advantageous. The U.S. Federal Reserve (Fed) raised interest rates four times. Its most recent target corridor is 2.25–2.50%, an entire percentage point above the level set at the start of the year.

In the EU, Germany relied on its stable and solid economy based on strong domestic demand, a high level of industrial resource utilization, low inflation and what remains a very low rate of unemployment. There was some downside due to bottlenecks in the country's labor market (shortage of specialists) as well as residential development in major cities and metropolitan areas. According to the German Ministry for Economic Affairs, the country's economy was "still on a growth trajectory" at the end of the reporting period despite some disruption to exports and one-off effects given the specific situation in the German automotive industry. The manufacturing industry continues to report a high order backlog and construction is booming. The other major European economies (France, the UK, Italy and Spain) continued to lag behind and faced a number of issues, many of which were political.

Ultimately, the European Central Bank (ECB) saw no new reason to raise interest rates in 2018. Its benchmark interest rate therefore remained unchanged at 0%, with banks continuing to face a negative rate of -0.4% for overnight deposits. However, the ECB announced the completion of its bond-buying program at the end of 2018.

MACROECONOMIC OUTLOOK FOR 2019

After an extended period of rather positive economic trends globally, as outlined above the OECD believes that growth peaked in 2018 and is now pointing to escalating risks, in particular in the near future. It again lowered its growth forecasts for gross national income in nearly all of the world's economic regions at the end of the reporting period. The growth rate of 3.5% forecast in November for 2019 and 2020 is not a weak figure overall. However, it should be noted that this average is heavily affected by some emerging markets (India, China and Indonesia), which are also showing more of a downward trend. Moreover, some of the rates in the more advanced economies are considered very modest. For example, growth of only 1.8% is forecast for the eurozone in 2018. The U.S.A. leads this group, at 2.7%. The economists at the OECD also expect to see higher inflation in the latter regions on the back of targeted efforts in Europe and the U.S.A. to use fiscal and monetary policy for this purpose in the last few years.

The IMF also anticipates global growth of 3.5% for 2019 and is likewise increasingly skeptical, especially when it comes to the eurozone. Shortly after 2019 got under way, it lowered its growth forecast for Germany again to just 1.3%. The crisis in the country's automotive industry played a major role in this decision.

Internationally speaking, a number of factors are making it difficult to formulate an economic outlook for 2019. The UK's withdrawal from the EU is the dominant factor in Europe. The Brexit negotiations intensified towards the end of the reporting period but still failed to produce a final agreement on the terms of the UK's withdrawal. In any event, the final choice between a hard or soft Brexit will have a major impact on Europe's future political and economic development. Italy is also causing problems within the EU. Relations with the EU's difficult neighbors, specifically Russia and Turkey, are also making it hard to predict future trends.

In the U.S.A., 2019 got off to a trying start with the longest government shutdown in U.S. history. This alone cost the world's biggest economy one- or two-tenths of a percent of growth for the year, and it does not look like this loss will be made up. It also appears that the Trump administration will face further showdowns with its Democratic opponents. The trade dispute with China could also escalate, which would not only impact those two countries, but would also have ripple effects on a number of other industrialized nations, first and foremost in Europe.

Coupled with a decrease in credit quality and rising interest rates, the increasing debt ratios on the part of companies and private households in a number of countries – and indeed entire economies – are also creating a very fragile environment in which isolated negative events could rapidly trigger global chain reactions. It is to a large extent political developments that determine whether these kinds of events materialize.

The Economic Policy Uncertainty Index, which was developed in the U.S.A. by professors Baker, Bloom and Davis, rose significantly, nearly tripling in 2018. The index measures the frequency with which the world's leading economic media outlets report applicable economic uncertainty, and is supplemented by measuring special economic forecast parameters observed at any given time. The figure at the end of 2018 was the highest since the measurements were first taken in 1996. Even the events of September 11, 2001 and the global financial crisis in 2008 failed to trigger a higher figure. It is assumed that economic performance is much more subdued in a climate of international uncertainty than in an environment of general optimism.

Against this backdrop, the Deutsche Bundesbank still considers the growth prospects for Germany's economy to be fairly positive in 2019 and beyond. Although the GDP growth forecast of 1.5% is not much higher than the IMF's figure, in its December 2018 "Outlook for the German Economy" the Bundesbank continues to talk of an ongoing economic boom. It believes that a pivotal role will be played by demographic trends, which will bring about a labor shortage (lack of specialists and an aging population) on the one hand, and a housing shortage and declining investments on the other. These obstacles are offset by private consumption, which continues to be fueled by rising wages. In its scenario, however, the Bundesbank assumes stable foreign trade, which of course exposes its forecast to criticism.

The Bundesbank believes the euro to U.S. dollar exchange rate will remain stable. It is projecting a rate of EUR/USD 1.14 in the coming years, which is in line with the rate at the start of 2019. However, the bank does not yet anticipate an interest rate rise for the eurozone in 2019, and only expects to see an end to negative interest rates the following year. In this assessment of the ECB's monetary policy, it also finds itself in a consensus with many other analysts and economics experts.

CAPITAL MARKET ENVIRONMENT

After a number of stock markets around the world had climbed to new highs in 2017, things by and large shifted into reverse in 2018. The FTSE All-World Index fell by a sizable 12% in the reporting period, a decline not seen since the last global financial crisis ten years ago. The largest global stock market losses were seen in countries with their own specific problems, such as Turkey and Argentina, but first and foremost in China. The indexes of some major stock exchanges there plummeted by 25–33%. This was exacerbated not only by weak global growth but also by the trade war with the U.S.A., which hit Chinese companies particularly hard. However, it was not just a bad year for stocks. According to one renowned hedge fund manager, 93% of the world's asset classes (meaning everything but gold and volatility) reported a negative performance in 2018.

In the U.S.A., the trading year was determined in the fourth quarter. Not only was this highly volatile, but it also saw a sharp contraction, with the S&P 500 losing more in these three months than it had gained in the first three quarters of 2018. The Dow Jones even started off the fourth quarter at an all-time high, but by the end of December had lost more than 6% overall for the year. Despite strong earnings growth at a number of listed companies, this marked the worst annual performance for the stock market in the U.S.A. since 2008. Technology stocks in particular had been responsible for record figures on the U.S. stock market in the prior year, but now it was precisely these stocks driving the negative performance, especially towards the end of the reporting period. The mid-cap and small-cap segments performed significantly worse than the very big names. The NASDAQ closed 2018 down roughly 4%. Its special Biotechnology index reported a much larger decline, although this was blamed entirely on the disastrous fourth quarter. These sharp losses had already been fully offset shortly after the end of the year. Comparing the index's level from the middle or end of January 2019 to the value exactly twelve months earlier, we can see that the market actually shifted sideways in 2018 and there are no indications of a decline.

The volatility on the U.S. markets, which had a knock-on effect on the rest of the world, was driven in particular by the pessimistic outlook and fears over inflation. The U.S.A. also faced a major political setback towards the end of the year with the shutdown of numerous government agencies. The Fed's decision to raise interest rates for the fourth time that year (from 2.25% to 2.5%) did not provide any relief either, even though this hardly came as a surprise. The Institute of International Finance, Inc., a global association of major banks, also found that the Fed had recently deprived the capital markets of a great deal of liquidity.

2018 was also a down year for most stock exchanges in Europe. After gains of approximately 8% in the previous year, the Euro Stoxx 50 closed down more than 15% year on year. The UK's FTSE 100, which had reached an all-time high just before the start of the year, dropped by more than 12%. In both cases (the UK and Europe as a whole), the pessimism and general uncertainty observed on the market were fueled by Brexit. France's CAC 40 was likewise down 12% at the end of the year.

On the German stock market, the DAX 30 had also hit a record high of nearly 13,500 points before losing significant ground in 2018. The DAX was actually among the biggest losers globally, with losses of over 18%. Analysts from Deutsche Bank traced the weak performance for 2018 back to the DAX's lack of diversification and German industry's heavy dependence on exports. There were also homegrown problems not related to economic trends, such as those seen in the automotive industry.

However, the number of initial public offerings (IPOs) in the U.S.A. grew despite the weak fourth quarter of 2018. In fact, 190 companies made their stock market debut, up nearly a fifth on the already healthy figure for the previous year (160). The proceeds increased by as much as 32%. Ten of these transactions were valued in the billions of dollars. Despite this, however, nowhere near all of the potential candidates went public. Several unicorns remain at the starting gates (for example Uber), meaning that the pipeline can be considered well stocked for 2019. Two-thirds of IPOs in 2018 were in the tech (52) and healthcare (76) industries, with biotech companies represented in 58 of the latter. Together, they amassed more than USD 6 billion in new capital. Thirty-two IPOs in the U.S.A. were Chinese companies that had chosen the U.S. capital market over exchanges in their home country.

Globally speaking, 2018 was also a good year for IPOs. The consulting firm EY (which publishes the Global IPO Trends report) counted a total of 1,359 IPOs, down a fifth versus the previous year, which had seen the highest number of IPOs for a decade. However, the issue volume was 5% higher than in the previous year, at USD 205 billion. The most active IPO markets were in the Asia-Pacific region, which accounted for 49% of global deal flow, although the number of these types of transactions declined by almost a half year on year, particularly in China. In Germany, the number of IPOs rose again, from 14 in 2017 to 19 in fiscal year 2018, although several planned flotations were either called off or postponed. Public offerings in the UK fell sharply, from 78 in 2017 to 51 in 2018, which was doubtless also due to Brexit.

INDUSTRY ENVIRONMENT

Developments in the global healthcare sector – an environment of increasing spending – are being driven not just by aging and growing populations, but also by continuous technological innovation. As in previous years the highest growth rates for the industry going forward are expected in Asia and the Middle East, with more moderate growth in Europe.

Innovative technologies in life sciences include promising new and improved diagnostic and therapeutic methods with improved outcomes for patients and greater benefits for healthcare systems. Nevertheless, in rich countries worldwide the environment is characterized by healthcare reforms, pressure on costs and prices and by the rather weak economic situation overall.

The number of mergers and acquisitions (M&As) in life sciences rose again in the reporting period, especially in the two biggest markets, the U.S.A. and China. The global transaction volume amounted to USD 322 billion, exceeding the prior-year figure by 18%. This figure was also driven by players perceived as being from outside the industry, such as tech giants Alphabet (Google) and Amazon. A study by consultants from KPMG (Germany) put it this way: "Major tech companies are penetrating the market with digital innovations and stirring up the value chain." Nonetheless, there were still some major transactions between traditional life science companies, such as the acquisition of Shire plc by Takeda Pharmaceuticals Co. Ltd. In the U.S.A., the consolidation trend was fueled by the increased political pressure on the prices of drugs and therapies.

Diagnostics remains a lucrative segment of the life sciences industry, which is benefiting in particular from innovation and technological progress. The subsegment of in vitro diagnostics (IVD), and in particular molecular diagnostics, has grown rapidly in recent years. From estimated global revenues of over USD 68 billion in 2018, market research institutes still anticipate annual growth of around 5% and, depending on the underlying data and calculation methodology, forecast global revenues well in excess of USD 80 billion in 2023. The field of immunodiagnostics/immunoassays currently dominates the IVD segment as a whole, and was the primary driver for revenue growth in 2018 in the corresponding segment of the Roche Group, which remains the world's largest diagnostics company. However, global growth rates of 4–5% are still forecast for blood tests. According to a study by BCC Research, the subsegment of blood tests in cancer diagnostics is expected to experience particularly rapid growth in the next few years. Analysts from Stratistics MRC believe that the subsegment will grow by more than 11%, from global revenue of around USD 1.8 billion in 2016 to just under USD 4 billion in 2023. One of the factors underpinning these expectations for the market are the demographic trends in key markets such as the U.S.A. and Europe, as well as China and Japan.

The diagnostics market as a whole remains fairly consolidated with competitors of all sizes, ranging from large European players (e.g., Roche, Bayer, Qiagen, BioMerieux), Sysmex from Japan and U.S. companies (e.g. Abbott, Bio-Rad, Becton Dickinson) to small companies like Epigenomics. The market also saw increased M&A activity in the reporting period, especially in molecular diagnostics, where 55 such transactions were counted globally. The major buyers included Abbott, Thermo Fisher and, above all, Roche. Two groups of companies are particularly sought after: manufacturers of R&D instruments and supplies, including for next generation sequencing or drug discovery, and companies that make new and unique diagnostic tests, of which Epigenomics is one.

A total of 169 M&A transactions were announced in the European life sciences sector in 2018. Broken down by indications, oncology made up the largest number. Nearly as many capital market transactions were seen here as in the two previous years. Analysts at Kempen counted 25 private placements (PIPE) and seven "major" (subscription) rights issues, which also included the capital increase at Epigenomics in October. BioNTech stood out in particular in Germany after completing one of the biggest rounds of financing in the entire European biotech sector in January 2018, raising USD 270 million.

In the United States, venture capital (VC) companies stepped up their investments in life sciences companies in the reporting period. More than USD 12 billion was invested primarily in start-ups in just the first six months, which was roughly three-quarters of the entire prior-year volume. The average capital volume per round of financing increased significantly in the last few years. The growing importance of immuno-oncology and even new technologies (big data) are automatically creating a necessity for larger investments and therefore also investors with greater financial capabilities. The VC arms of major pharmaceutical and diagnostics companies and technology groups are therefore increasingly making an appearance. Similar observations have been made in China, where average investment volumes in the individual companies were even higher than in the U.S.A.. At the same time, Chinese investors are stepping up their investments in promising companies within this sector worldwide. The Chinese Internet giant Tencent's involvement in

the most prominent U.S. start-up, Grail, Inc., also caused a stir. Aside from some well-known pharmaceutical groups, Grail is also backed by Bill Gates and Jeff Bezos. The company has already raised more than USD 900 billion in series B financing. Despite being headquartered in California, however, Grail plans to go public in Hong Kong in the near future. Like Epigenomics, Grail operates in the field of liquid biopsies.

As we had noted last year, Chinese investors will presumably be increasingly focused on life sciences in the near future, and diagnostics in particular. Chronic lifestyle and age-related diseases like cancer are expected to become increasingly prevalent in Chinese society as a consequence of its fast growing population, higher standard of living and the adoption of western lifestyles. Developments in China are also likely to intensify competition and it is only a matter of time before Chinese companies move beyond purchasing know-how and technology from the west to being represented on the global markets with their own technologies and products.

As is the case throughout the healthcare industry, being correctly positioned in the regulatory environment and on reimbursement are significant factors in the success of companies active in developing and commercializing novel diagnostic tools and procedures. Properly addressing these factors in different markets will remain a challenge, given the fragmented nature of the regulatory and reimbursement landscapes. While the U.S.A. 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 and entrepreneurial spirit among its population. It is becoming the most interesting market to consider in the medium term and it may offer more and greater opportunities for our industry than presently expected.

The specific implications of the global economic situation on our business and our Group are discussed in the Report on Opportunities and Risks and the Report on Expected Developments sections of this Group management report.

OVERVIEW OF OUR BUSINESS IN 2018

EPI PROCOLON

CMS decision on reimbursement

Since receiving FDA approval for Epi proColon in 2016, the issue of reimbursement on the U.S. market has been the focus of all activities for Epigenomics. The Centers of Medicare & Medicaid Services (CMS) play a key role in this respect. The CMS is a U.S. federal agency which administers a number of federal and state health programs (including Medicare and Medicaid). One of the Agency's responsibilities is to set reimbursement prices for medical services provided to those it insures. It is estimated that 40% of the available market for our colorectal cancer tests in the U.S.A. is covered by Medicare (patients aged between 65 and 75). There are three key elements regarding reimbursement in the U.S. healthcare system: Medicare coverage, Medicare rate, and private payor adoption.

In 2017 there was some confusion over the CMS's decision on how much to reimburse for Epi proColon. After the CMS initially activated a CPT (Current Procedural Terminology) code for our Septin9 marker at a reimbursement rate of USD 83.67 per test, we filed a request for a reconsideration with the CMS. In response, the CMS provisionally upheld the code previously allocated to our test, while increasing the corresponding reimbursement rate to USD 124.69 per test. In its ultimate determination of the catalog of rates for 2018, the CMS then changed its decision on the reimbursement rate for Epi proColon and altered the procedure used for issuing the code. The price then had to be determined using the "gapfill" method, which is used when there is no comparable test available. As part of this process, the regional Medicare organizations – the Medicare Administrative Contractors (MACs) – set provisional reimbursement prices in the early part of each year. CMS then sets the final price the following November on the basis of these prices. We then announced the result of the change in how prices are set on June 11, 2018: the MACs had ultimately agreed to a reimbursement rate of USD 192.00 per test. We consider this to be a significant milestone in that it gives an adequate assessment of our innovative blood test to screen for colorectal cancer. As a result, we got a very positive response from our current laboratory customers as well as from prospective new customers in the U.S.A. due to the fact that a high reimbursement rate is financially very attractive for them as well. On December 14, 2018, the CMS then published the official Clinical Lab Fee Schedule (CLFS) for 2019, which includes the final reimbursement rate of USD 192.00 for Epi proColon. Getting the higher amount approved was another important step for Epigenomics on the path to reimbursement, as the provisions of the Protecting Access to Medicare Act (PAMA) stipulate that the rate of USD 192.00 per test will remain unchanged for at least three years after it takes effect on January 1, 2019.

As for the question of if and when the CMS will begin to reimburse for our test, however, a decision was not reached in the reporting period. It will do so either through a National Coverage Determination (NCD) or a statutory regulation. We had hoped that at least one of these options would come to fruition in the years prior and have been intensively working on both fronts to further our interests.

However, a key condition for an NCD is for the test to be incorporated in the guidelines of the various influential medical professional societies, such as the colorectal cancer guidelines of the American Cancer Society (ACS). The publication of the new ACS guidelines had originally been anticipated in 2017, but was further delayed. Then, on May 30 of the reporting year, contrary to our expectations and much to our disappointment, we found out that Epi proColon had not been incorporated in the updated ACS guidelines. Because our blood-based test is a new technology and there is no long-term or modeling data documenting the benefits versus harms of our technology guideline societies have requested a "microsimulation model" to evaluate the long-term effects of our product.

Among other things, microsimulation models are used to show the outcome and benefits of various strategies for detecting colorectal cancer at an early stage. These models are utilized by various screening guideline groups, such as the ACS and the United States Preventive Services Task Force (USPSTF) to aid in the development of screening guidelines. To date, none of the existing models used for guideline development has incorporated our methylated Epi proColon Septin9 blood test as an early detection method.

We immediately commissioned well-known experts to create a microsimulation model, which was completed in 2018. This model incorporates the Epi proColon test and also factors in the key variable of adherence to testing. Adherence to testing is a critical element when it comes to improving participation rates in CRC screening. Blood-based testing holds promise to improve CRC screening participation rates for the roughly 35% of eligible people who to date have not made regular use of screening in accordance with the guidelines. After the end of the reporting period, in January 2019, we announced the models completion with favorable results for Epi proColon. We expect the model to be published in a peer reviewed scientific journal in the first half of 2019.

Another way to get a positive reimbursement decision from the CMS is through the aforementioned statutory regulation. A bipartisan bill on colorectal cancer screening had already been introduced in 2016. Republican senator Shelley Moore Capito and Democratic senator Martin Heinrich proposed the legislation to the U.S. Senate in Washington D.C. in March 2018. The Senate bill is comparable to House bill "Donald Payne Sr. Colorectal Cancer Detection Act" introduced by Democratic congressman Donald M. Payne, Jr. Both bipartisan initiatives aim to provide coverage by the CMS for FDA-approved qualifying colorectal cancer (CRC) screening blood-based tests.

Michael Sapienza, CEO of the Colorectal Cancer Alliance – the largest and longest-standing non-profit organization fighting colorectal cancer in the United States – offered his organization's support for the legislation as it "would provide Medicare reimbursement for FDA-approved blood screens for colorectal cancer and change the paradigm when it comes to participation in screening. Medicare reimbursement for these life-saving tests can dramatically improve the screening rate in underserved areas and significantly cut health care costs".

As part of the budget adopted for 2019, on October 2, 2018 the U.S. Congress officially requested that the CMS allow for the cost of colorectal cancer screening blood tests to be reimbursed. In the report published with the budget act adopted on September 28, 2018, Congress requested that the CMS "make it possible to reimburse for blood tests that help determine the need for colonoscopies, improve participation in screening and reduce the number of advanced colorectal cancer diagnoses". We believe this to be another important step in the ongoing legislative process.

Once this law goes into effect, an independent reimbursement decision by the CMS will no longer be needed. The law would require that the CMS provide reimbursement for colorectal cancer screening using blood-based tests. Unfortunately, at the end of the reporting period it was still unclear to us if and when the government would ultimately pass the legislation and when it would enter into force.

The delays arising from these complex and often opaque processes also weighed on our business performance in 2018 and created uncertainty in the meantime.

Studies on Epi proColon

We announced the start of the post-approval study "Performance of Epi proColon in Repeated Testing in the Intended Use Population (PERT)" in the U.S.A. in August 2017, thereby meeting one of the customary requirements by the Food and Drug Administration (FDA) for screening tests after having received approval for Epi proColon in screening for colorectal cancer in 2016. Epi proColon is intended for average-risk patients who are unwilling or unable to be screened with other methods including colonoscopy and stool-based tests.

The trial assesses the participation rate and performance of the Epi proColon test in consecutive years as well as the willingness of patients with a positive Epi proColon test to be referred to colonoscopy. The multicenter study is being carried out at six different study sites in the U.S.A.. In 2018, 1,200 patients were admitted to the study. Within three years of its start, samples had been collected from roughly 4,500 patients in total. These are tested at four independent laboratories. Any patient who receives a positive test result is immediately advised to undergo a colonoscopy. Our plan is to include another 1,600 patients in the study in 2019. We also expect half of the participants included in the 2018 study to be retested.

In the October of the reporting period we announced the start of a study carried out by the Veterans Administration New York Harbor Healthcare System (VA Manhattan) for participation in a colorectal cancer screening with Epi proColon. VA Manhattan consists of a number of hospitals operated by the U.S. Department of Veterans Affairs in New York City. The study examines patients who have rejected both a colonoscopy and a fecal immunochemical test (FIT). The objective is to evaluate the potential of a blood-based test as an acceptable alternative for patients resistant to screening. If the proposed study shows good acceptance of blood tests and a reliable colonoscopy follow-up in the event that the patient receives a positive test result, the blood test could play a key role in improving participation rates.

VA Manhattan received grants from the American Society for Gastrointestinal Endoscopy and the New York Society for Gastrointestinal Endoscopy to carry out the study. The Narrows Institute is overseeing the study, while Epigenomics is offering test and financial support.

HCCBloodTest

In April 2018 we announced promising results from two clinical studies in EBioMedicine (supported by Cell Press and The Lancet). The results show high accuracy of our mSETP9 biomarkers (Septin9) for detecting liver cancer in patients suffering from cirrhosis.

The two independent clinical studies (observational/case-control) included 289 cirrhosis patients with or without liver cancer from France (initial study) and Germany (replication study). The mSEPT9 blood test demonstrated high sensitivity of 90.6% overall at a specificity of 87.2%. Moreover, a triple-negative mSEPT9 test had the highest negative predictive value for excluding liver cancer (97.2%), whereas a triple-positive mSEPT9 test had the highest positive predictive value for retaining a diagnosis of liver cancer (91.2%).

The results of the replication study were consistent with those of the initial study in all diagnostic parameters. In addition, the mSEPT9 test had a higher degree of diagnostic accuracy than the alpha-fetoprotein test currently in use.

In order to obtain more clinical evidence, the initiator of the study, Abderrahim Oussalah MD, Ph.D. (Department of Molecular Medicine at University Hospital Nancy (France)) began another prospective clinical study with 440 patients with the aim of confirming the test's diagnostic precision in detecting liver cancer (SEPT9-CROSS study, ClinicalTrials ID: NCT03311152). Similar studies are planned for the future to examine the mSEPT9 blood test in screening cirrhosis patients in order to improve the risk forecasting and for personalized therapy management of liver cancer.

According to the World Health Organization (WHO), liver cancer is the fifth most common cancer in men and seventh most common in women. It is the second most common cause of cancer-related death globally, and more than 700,000 new cases are diagnosed every year. Hepatocellular carcinoma (HCC) accounts for 70–90% of primary liver cancers. The primary risk factors for HCC include cirrhosis of the liver, Hepatitis B and C infections, alcoholic liver disease and non-alcoholic fatty liver disease.

In China, liver disease is the second most common type of cancer (approximately 466,000 new cases in 2015) and the number one cause of cancer-related death (more than 422,000 deaths in 2015). In the U.S.A. there are roughly 40,000 new liver cancer diagnoses every year and in the E.U. approximately 47,000 deaths from the disease are counted annually. Our initial estimates show that the global market for liver cancer surveillance among patients with cirrhosis is likely to cover more than 10 million tests annually with a market potential of EUR 3 billion.

Given the strong clinical data, the very good response from the medical and scientific communities, and at the same time the considerable diagnostic need around the world, we quickly decided to develop a relevant product and announced this at the beginning of July 2018. Product development was rapid due to the mSEPT9 markers already used in our Epi proColon test and the proprietary technology applied for this. Just four months later (at the end of October) we had obtained the CE marking for this new diagnostic test, which we plan to market under the name HCCBloodTest going forward. We plan to launch a prospective study in the U.S.A. in 2019 and submit the results to the FDA for market approval. We are still looking into other options for expediting the test's approval by the CFDA in China.

CORPORATE ANNOUNCEMENTS IN 2018

Notice of a loss in accordance with section 92 (1) Aktiengesetz (AktG)

On April 17, 2018 we notified the capital market of our assessment that, at our best judgment, the Company had incurred a loss greater than half of its share capital, and that this was primarily due to budgeted operating losses.

In accordance with section 92 (1) of the German Stock Corporation Act (Aktiengesetz – AktG), a loss amounting to half of the share capital triggers a legal obligation to immediately call shareholders to a general shareholders' meeting. This is held so that the Executive Board can report the loss and discuss the Company's situation. This is a provision of German company law that has been and continues to be applied with regard to financial statements prepared in accordance with German commercial law (HGB). It does not affect the consolidated financial statements prepared in accordance with IFRSs, on which this Group management report is based.

Given that this occurred close to the date of Epigenomics AG's Annual General Shareholders' Meeting on May 30, 2018, section 92 (1) AktG did not require that an extraordinary general shareholders' meeting be convened. Instead, the Executive Board's statement as required by the AktG was issued as an independent item on the agenda at the Annual General Shareholders' Meeting. In doing so, the Executive Board notified shareholders that the Company likely has sufficient financial resources at this time to fund the operations beyond 2018. It was also confident that it will be able to raise additional capital over the course of the current fiscal year.

Capital increase through the issue of subscription rights

On October 3, 2018, we announced our plans for a capital increase against cash and partly in-kind contributions with shareholders' subscription rights utilizing the authorized capital and totaling up to 50% of issued shares in accordance with the resolutions of the 2018 Annual General Shareholders' Meeting. The Company's Executive Board resolved to do so on October 7, 2018 with the approval of the Supervisory Board. On October 16, the subscription price for the new shares was set and announced at EUR 1.86 per share.

As part of the capital increase, we were able to place the full amount of the resolved capital increase by up to EUR 12,007,180 (i.e. 50% of the existing share capital at that time). The Company's share capital was increased accordingly by EUR 12,007,180, from EUR 24,014,360 to EUR 36,021,540 through the issue of 12,007,180 new non-par value registered shares against cash and partly in-kind contributions. The private placement with select qualified investors was significantly oversubscribed. All of the privately placed shares were allocated to several institutional investors from the U.S.A., including specialized healthcare funds.

The gross proceeds from the capital increase amounted to EUR 22.3 million (including a contribution in kind). Of that figure, roughly EUR 21.2 million was raised in cash. Moreover, our liabilities under the convertible notes issued to Cathay Fortune International Company Limited (CFIC) in the previous year decreased from EUR 7.1 million to EUR 6.0 million. This was due to the fact that CFIC had contributed notes amounting to EUR 1.1 million to the capital increase as contributions in kind.

The capital increase was entered into the commercial register on October 24, 2018.

FINANCIAL RESULTS

Overview of the calendar quarters in the 2018 reporting year:

EUR thousand (except where indicated otherwise)	Q1	Q2	Q3	Q4	2018
Revenue	309	462	544	218	**1,533**
Earnings before interest and taxes (EBIT)	-3,250	-2,578	-3,038	-4,029	**-12,895**
EBIT before depreciation and amortization (EBITDA)	-3,175	-2,502	-2,961	-3,949	**-12,587**
EBITDA before share-based payment expenses	-3,185	-2,200	-2,618	-3,433	**-11,436**
Earnings per share (in EUR)	-0.13	-0.11	-0.12	-0.11	**-0.47**
Net cash flow	-2,496	-1,758	-2,755	-10,658	**3,647**
Cash consumption	-2,424	-1,756	-2,691	-2,756	**-9,627**
Total liquidity[1] at end of period	11,213	9,360	6,632	17,140	**17,140**

In the Outlook section of our prior-year Group management report we forecast that revenue would increase to between EUR 2.0 million and EUR 4.0 million for fiscal year 2018. Once again, planning was hindered by the uncertainty over the reimbursement decision for Epi proColon in the U.S.A., which would provide a significant boost to the sales figures. As it became clear over the course of the reporting year that such a decision would not be made in 2018, we lowered our forecast accordingly to between EUR 1.5 million and EUR 2.5 million. The final figure was ultimately at the lower end of this forecast as we did not recognize any licensing revenue from our licensing agreement in China in the last quarter.

At EUR 15.9 million, total operating costs in fiscal year 2018 increased significantly as against the year prior (EUR 13.2 million), but were still well below our forecast. This shortfall was mainly due to the cost of sales, which in the absence of the planned product sales did not accrue, as well as personnel costs since the market situation in the U.S.A. did not motivate us to increase our marketing and sales staff there as planned.

The EUR 1.4 million in other income generated in the reporting year was mostly unplanned (e.g. foreign exchange gains and reversals of provisions) and – in addition to the cost savings mentioned – also helped us to slightly exceed the forecast range of EUR -11.5 to -14.0 million for EBITDA before share-based payment expenses, with a final figure of EUR -11.4 million.

We saw no need for any major investments in the reporting period, meaning that in connection with the earnings situation described above, our cash consumption was much lower than planned, at EUR 9.6 million. Nevertheless, it was also necessary for the Company to raise further liquidity from the capital market, which we did in the third quarter of 2018 through a successful rights issue leading to net cash inflows of EUR 19.3 million. At the end of the year, this also made it possible to repay a convertible note issued to a Chinese investor in 2017 since exercising the conversion rights was not a financially attractive option for the investor.

With this and the capital increase, our equity ratio then rose to 85.3% at the end of the reporting year after an initial figure of 53.5%. We ended fiscal year 2018 with EUR 3.4 million more in available liquidity than we began with (EUR 17.1 million as at December 31, 2018 versus EUR 13.7 million at the start of the year).

In conclusion, the Company's financial situation was somewhat weakened in the meantime but generally regained stability following the successful capital increase.

[1] *Total liquidity = Cash, cash equivalents and marketable securities.*

OUR STOCK

Market data (XETRA/Frankfurt)	Dec 31, 2017	Mar 31, 2018	June 30, 2018	Sept 30, 2018	Dec 31, 2018
Number of shares outstanding	24,014,360	24,014,360	24,014,360	24,014,360	**36,021,540**
Closing price (in EUR)	4.25	3.60	2.21	2.19	**1.77**
Market capitalization (in EUR)	102,061,030	86,451,696	53,071,736	52,591,448	**63,758,126**

	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018
Average daily trading volume (units)	30,722	29,234	57,687	17,722	**86,486**
Highest closing price (in EUR)	4.71	4.77	4.02	2.49	**2.70**
Lowest closing price (in EUR)	3.61	3.60	1.89	2.11	**1.70**

Epigenomics' share price in 2018 hit its high for the year of EUR 4.77 in Xetra trading on January 3. For the rest of the year, Epi proColon not being incorporated in the ACS guidelines had a negative impact on the share price, which fell below EUR 2.00 in May 2018. The shares closed 2018 at EUR 1.77 in Xetra trading.

OVERALL ASSESSMENT OF THE 2018 FISCAL YEAR

While we are disappointed we did not achieve Medicare coverage in 2018, we are none the less pleased that we have made progress in terms of product development in the reporting period. On the one hand, we very quickly obtained CE marking for a new product, the HCCBloodTest, and launched it on the market. The outstanding performance of this product, as demonstrated in a study by the University of Nancy, as well as its obvious market potential leave us very optimistic for the future. We even surpassed our goals for creating automation solutions for our customers when measuring blood samples with Epi proColon. Another very positive development in 2018 was the successful completion of our capital increase, which was not only significantly oversubscribed but also brought us new institutional investors from the U.S.A..

The Company's performance was not entirely satisfactory in 2018, especially with regard to the U.S. market. This is largely due to delays in decisions from the competent bodies on reimbursement for Epi proColon.

COMMERCIALIZATION AND BUSINESS DEVELOPMENT

Epi proColon has been available throughout the U.S.A. since it received FDA approval in 2016. The test has since been offered through major laboratory chains there (e.g., LabCorp, ARUP and Sonic Healthcare). Unfortunately, there was still no clarity about CMS coverage and reimbursement rate for us and our customers at the beginning of the reporting year. In the past, we have successfully demonstrated that patients who refuse a colonoscopy and are subsequently asked to choose between a stool test (FIT) and our blood test to take part in screening overwhelmingly choose the blood test. In reality, however, this choice currently also involves an additional cost consideration for the patient. A FIT test comes at little or no cost to the patient, while a blood test means out-of-pocket costs for them. It is clear that a reimbursement decision in the U.S.A., whether via the CMS or by means of legislation, is the key to our success. At least with regard to the reimbursement price, however, we were able to achieve great success in the course of the year: CMS's announcement in the summer of 2018 that our Septin9 test would be included in the Clinical Lab Fee Schedule with a reimbursement price of USD 192.00 in future was an announcement in this context that helped us a lot, especially with regard to the laboratories. The feedback from this target group was very positive, whether it was through direct contact or discussions with them at events and conferences. The laboratory sector also considers this reimbursement price to be very attractive.

The primary focus of our business activities therefore remains on carrying out activities that might support and/or accelerate the outstanding decision. To this end, we are actively seeking dialog with decision-makers – the CMS, private insurers, screening guideline groups and, of course, politicians. We therefore commissioned well-known experts, among other things to create a microsimulation model in the reporting period. These models are used to show the outcome and benefits of various strategies for detecting colorectal cancer at an early stage. They are utilized by various screening guideline groups, such as the United States Preventive Services Task Force (USPSTF) and the American Cancer Society (ACS) to aid in the development of screening guidelines. The model has yielded good results for the use of Epi proColon in early detection systems and will help us particularly in further talks with the ACS and USPSTF once published.

We also entered into a new agreement with our exclusive sales partner Polymedco in the U.S.A. during the reporting period. Not only had Polymedco taken on the marketing and sales for Epi proColon in North America as part of the previous agreement, it also held overall responsibility for logistics, warehousing, delivery to customers and billing. We have since organized our location in San Diego so that we can perform the logistic tasks independently. As of the beginning of 2019, our test is now being stored in our own warehouse, we have our own employees sending it to customers, and we are also handling the billing. With its considerable experience in early cancer screening products, Polymedco will now, on a commission basis, focus solely on traditional sales and marketing tasks. This method has brought us closer to the customer than before and allows us to control the entire value chain. It also enables us to realize the product revenue in full and gives us greater economic efficiency. In reference to the reimbursement rate set by the CMS, we have also presented our customers with a new pricing structure for our product starting in the new year.

The European market for IVD products is highly fragmented and dominated by local influences specific to individual countries. Moreover, in many European countries CRC screening is organized at a governmental level and the barriers to entry into such systems are therefore typically very high. Direct payor segments are small in most markets and need to be addressed individually at the level of physicians and/or patients. Therefore, for the time being we only have a limited focus on commercializing Epi proColon in Europe. We sell the product ourselves in selected countries (e.g., in Germany) and use distribution partners in other markets.

We have also identified individual markets in Asia (in South East Asia specifically) where we see good opportunities for the test to be accepted by direct payors. We mostly serve these markets through local distributors. One such distributor has also now opened up access to the markets on the Arabian Peninsula.

Going forward, we expect increasing interest on the part of physicians and patients across all markets, with commercial success in the U.S.A. also promising a positive impact on commercialization in Europe. To a large extent, traditional commercialization activities, for example, are not available to us in Germany given the provisions of the German Health Services and Products Advertising Act (Heilmittelwerbegesetz). However, success stories from the media regarding a blood test for early colorectal cancer screening in the U.S.A. would certainly help get the attention of our target groups, namely physicians, patients and laboratories.

RESEARCH AND DEVELOPMENT (R&D)

In fiscal year 2018 we successfully developed and received the CE mark for HCCBloodTest, a new blood-based liver cancer test. The clinical and analytical data needed to reach this milestone came from cooperation with academic partners at the University Hospital Nancy and the Institut National de la Santé et de la Recherche Médical (INSERM) in France. The biomarker for the HCCBloodTest is methylated Septin9, which is the same marker used to detect colorectal cancer in our Epi proColon test. However, the intended use was altered to reflect the change in the target group. For the liver cancer assay, the rules used to assess the test's positivity were set with reference to the data from the University of Nancy study (see our April 2018 press release). We are committed to further optimizing the performance of the HCC assay and to possibly adding additional markers to the test.

We also began a cross-sectional study in 2018 on cirrhosis patients at high risk of developing HCC. The study will have 200 subjects and will be completed in 2019. Roughly 50% of the samples will come from patients diagnosed with HCC and the rest from those with no clinical evidence of HCC. We plan to examine the correlation between a positive test result and the presence of HCC in this study, which will enable us to measure the sensitivity and specificity of our blood-based liver test and evaluate modified versions of the test for improved clinical precision.

In the reporting period, our R&D team also successfully developed a pipetting-robot platform, which makes it possible to automate the processing of 48 or 96 plasma samples in parallel. Together with the methods implemented, 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, capturing of magnetic particles and dispersion, all of which are necessary during the process. The resulting DNA can ultimately be used for PCR amplification and analysis. Currently, a technician typically processes 16 samples at a time. Using the new automation system, however, 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.

Ultimately our R&D activities focused on examining new approaches for amplifying bisulfite-converted DNA in order to further optimize the analytical properties of the process. We have developed methods aimed at measuring several biomarkers in the multiplex process or in parallel, and explored new options for capturing different sections of a double-tranded DNA molecule sequence. This will make it possible to develop a new generation of PCR assays in the future that perform better clinically and can be repeated with greater accuracy.

QUALITY MANAGEMENT

Our day-to-day work conforms to the strictest regulatory standards. Our well-established, comprehensive quality management system aids in the design, development, manufacturing and global distribution of in vitro diagnostics (IVD), and in doing so meets the specific requirements of 21 CFR 820 and ISO 13485. Epigenomics AG regularly passes audits and inspections of its ISO-certified quality management system carried out by both an accredited certification authority and the U.S. FDA inspectors.

ISO 13485 is an internationally recognized quality management standard developed for medical devices and diagnostics by the International Organization for Standardization (ISO), a worldwide federation of national standards bodies. 21 Code of Federal Regulations (CFR) 820, Quality System Regulation, represents the U.S. current good manufacturing practice (cGMP) requirements for medical device manufacturers. 21 CFR 820 and ISO 13485 specify requirements for a quality management system which ensures the organization's ability to provide medical devices and diagnostics that consistently meet customer and applicable regulatory requirements.

The implementation of a quality management system compliant with 21 CFR 820 and ISO 13485 specifically demonstrates Epigenomics AG's ongoing commitment to developing safe and effective diagnostic products such as its tests for colorectal, liver and lung cancer. The Company works continuously to improve its quality management system, thereby creating a solid foundation to obtain additional global regulatory approval for its products.

FINANCIALS

RESULTS OF OPERATIONS

Because the issue of reimbursement for Epi proColon on the U.S. market remained unresolved in 2018, our revenue for the year of EUR 1.5 million remained below our original expectations, which had been based on the assumption that a positive reimbursement decision would be made in the second half of 2018. On this basis, we had announced expected revenue of EUR 2 million to EUR 4 million at the start of the year. With the release of the Q3 2018 results, however, we had lowered this forecast to at least EUR 1.5 million, a figure that we ultimately met.

This was a decrease compared to prior-year revenue of EUR 1.9 million. While our product revenue increased from EUR 0.5 million to EUR 0.8 million, the EUR 0.6 million in licensing income in 2018 lacked the high one-off out-licensing item that had raised our overall revenue in the previous year. Product sales thus made up more than half of our overall revenue for the first time, with a large share generated by the business in the U.S.A.. By contrast, most of our licensing income was generated from our Chinese license partner.

Given the repeated drop in the ratio of licensing income to overall revenue, which is essentially characterized by very low cost of sales, our gross margin was still high at 71%, but was down year on year (2017: 87%).

Other income increased by EUR 0.3 million to EUR 1.4 million in the fiscal year (2017: EUR 1.1 million) and primarily related to foreign exchange rate gains (EUR 0.7 million) and reversals of provisions (EUR 0.6 million).

Research and development (R&D) costs rose significantly from EUR 4.3 million in 2017 to EUR 6.4 million in the reporting period. A large part of the increase can be traced back to external costs that arose mainly in connection with carrying out our studies. The post-approval study for Epi proColon in the U.S.A. was one such case. After lower than anticipated enrollment in the previous year, the study is now proceeding as planned. Personnel costs also increased in 2018 due to the high levels of individual target achievement, which caused a year-on-year increase in bonuses to be paid.

Selling, general and administrative costs were also impacted by higher personnel expenses. In addition to the expansion of Executive Board from two to three members, the variable remuneration also contributed to this increase driven by high levels of individual target achievement in the reporting period. The new issue of employee option rights also incurred a greater expense. There was an offsetting effect from legal and consulting fees, which were much higher in 2017 than in the reporting period due to factors including a takeover attempt by a group of Chinese bidders. The total selling, general and administrative (SG&A) costs amounted to EUR 8.7 million in the reporting year (2017: EUR 8.0 million).

Other expenses, almost all of which were due to foreign exchange rate losses as in the previous year, declined from EUR 0.6 million in 2017 to EUR 0.3 million in 2018. Net foreign exchange gains/losses amounted to EUR 0.4 million (2017: EUR -0.6 million).

Total operating costs increased mainly due to the increase in R&D expenditure, from EUR 13.2 million in 2017 to EUR 15.9 million in the reporting period. However, these were also well below our internal forecasts, whereby the negative effect from the low overall revenue in the budget comparison was largely offset.

EBIT decreased to EUR -12.9 million in 2018 from EUR -10.3 million in the previous year, a better result than forecast. Adjusted for depreciation and amortization, EBITDA amounted to EUR -12.6 million (2017: EUR -9.9 million). At the start of the year, our forecast for EBITDA before share-based payment expenses for 2018 was between EUR -11.5 million and EUR -14.0 million. The final figure on December 31, 2018 amounted to EUR -11.4 million, which was slightly better than expected due not only to the fact that overall costs were lower than budgeted, but also to the unexpectedly high level of other income.

The negative financial result of EUR 0.5 million in the reporting period (previous year: EUR -0.2 million) was mainly caused by the interest expense for the convertible note, which we repaid to the Chinese investor just before the end of the year. This had been issued in the third quarter of the prior year and therefore had less of an impact on the financial result for 2017.

The tax income increased from EUR 0.2 million in the prior year to EUR 0.7 million in the reporting period. The tax reform enacted in the U.S.A. in 2017, which saw the corporate income tax rate cut from 34% to 21%, gave rise to a one-off item for us in the prior year due to remeasurement of the tax loss carryforwards that had accrued up to that point. This lowered the income that had accrued at that time accordingly.

FINANCIAL POSITION AND CASH FLOW

Our cash consumption decreased to EUR 9.6 million in 2018 from EUR 10.1 million in the prior year. The EUR 0.5 million decline was almost entirely attributable to the lower payments for investments and the simultaneous receipt of investment grants.

At EUR -10.4 million, the cash flow from operating activities was higher than in the prior year (EUR -9.6 million) due to the higher operating loss. The changes in net current assets partly offset this higher loss.

The only investing activities in 2018 were payments to acquire property, plant and equipment totaling just under EUR 0.1 million, which were mostly used to pay for technical lab equipment and replacement purchases relating to IT. Investment grants amounting to EUR 0.8 million were also obtained from a project funded by the EU, thereby resulting in a net capital inflow from investing activities of EUR 0.7 million. In the previous year, payments had exceeded EUR 0.5 million due to double the level of investments in property, plant and equipment and in connection with development activities subject to capitalization.

The cash flow from financing activities amounted to EUR 13.3 million in fiscal year 2018 (2017: EUR 11.5 million) and included the gross proceeds from our capital increase in October 2018 (EUR 21.3 million). This was reduced by the EUR 2.0 million in associated expenses and the EUR 6.0 million repayment of the convertible note to Chinese investor Cathay Fortune.

As a result of these financing activities, our liquidity at year-end 2018 increased to EUR 17.1 million (comprising cash and cash equivalents of EUR 16.5 million and available-for-sale securities of EUR 0.7 million) and was thus EUR 3.4 million higher than the EUR 13.7 million held at the beginning of the year.

NET ASSET POSITION

Our equity ratio increased significantly again in the reporting period, from 53.5% at the beginning of the year to 85.3% at the end of the year. This was due on the one hand to the significant rise in equity itself, which increased by EUR 8.0 million during the year (from EUR 10.6 million to EUR 18.6 million). The capital increase in October more than compensated for the net loss for the year of EUR 12.7 million and the decrease in other comprehensive income by EUR 0.6 million.

Our equity ratio was on the other hand also lifted by the repayment of the convertible note to Chinese investor Cathay Fortune towards the end of the reporting period. This had still been recognized in the balance sheet on December 31, 2017 at a figure of EUR 6.5 million.

While the increase in trade payables from EUR 1.0 million to EUR 1.4 million over the course of the reporting period was only attributable to effects relating to the reporting date, other liabilities rose from EUR 0.6 million to EUR 0.8 million, primarily as a result of higher claims on the part of our employees.

With respect to current provisions, the EUR 0.6 million set aside for claims under phantom stock programs at the start of the year was almost fully reversed. There were no new expenses for these instruments in 2018. Rather, rights issued in the years prior either expired or were exercised, meaning that the total number of rights still outstanding went down. On the other hand, the valuation of the remaining rights decreased year on year due to the drop in our share price as of December 31, 2018. However, this decline was largely offset by an increase in employee bonus provisions, meaning that total current provisions only decreased marginally from EUR 1.1 million to EUR 1.0 million.

There was an increase in non-current assets from EUR 2.9 million as at December 31, 2017 to EUR 3.6 million as at December 31, 2018. While intangible assets decreased from EUR 0.7 million to EUR 0.5 million over the period due to amortization, and the depreciation of property, plant and equipment was roughly equal to the new additions, our deferred tax assets increased from EUR 1.5 million to EUR 2.4 million due to the significant increase in tax loss carryforwards from our U.S. subsidiary.

Current assets increased from EUR 16.9 million at the start of 2018 to EUR 18.3 million as at the balance sheet date. A major reason was the EUR 3.4 million increase in liquidity (cash and cash equivalents increased by EUR 3.7 million and marketable securities decreased by EUR 0.3 million). Trade receivables decreased by EUR 0.8 million in the period, mostly due to a single substantial receivable towards the end of the prior year which was settled during the reporting period. On the other hand, other assets declined by EUR 1.3 million, from EUR 1.9 million to EUR 0.6 million. The incoming payment for claims still outstanding from a project funded by the EU in the amount of EUR 0.8 million was the primary reason for the decrease.

Total assets rose by EUR 2.0 million to EUR 21.8 million as of December 31, 2018 (December 31, 2017: EUR 19.8 million).

EMPLOYEES

At the end of the reporting year we had 44 employees (December 31, 2017: 46). On average for the year, we employed 43 people (2017: 44). 32 employees are under contract with the German company and the remaining 11 with the U.S. subsidiary. Employee turnover was once again low. At no point did we have any problems filling vacant or newly created positions with qualified personnel when needed in either Germany or the U.S.A..

All of our employees in Germany work at the Company's headquarters in Berlin. We also commenced operating activities in the U.S.A. from our new location in San Diego, California in the spring of 2018. The expected reimbursement decision regarding Epi proColon in the U.S.A. had prompted us to plan new hires for 2018, but this did not come to fruition. We now expect to do so in 2019, with most of the jobs being in San Diego.

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 are active in the areas of business and commercial development, customer and technical service, accounting, finance, legal, human resources, IT, investor relations as well as general management.

We comply with all legal requirements regarding our employees, which also applies to compliance with the General Act on Equal Treatment (Allgemeines Gleichbehandlungsgesetz – AGG). Our employees are hired and promoted solely on the basis of their suitability, qualifications, motivation, willingness to perform and willingness to learn. The age structure and gender of our employees remained very well balanced in 2018. The headcount at the end of 2018 was roughly half men and half women.

Epigenomics supports its employees by offering flexible working (time) models, for example to improve work-life balance. Among other things, these include agreements on flexible working hours, part-time work and work from home. Personnel development measures and training opportunities for our employees are also very important to us. The Human Resources department also ensures occupational medical support for all of our employees.

Total personnel costs amounted to EUR 7.3 million in 2018, which was much higher than in the year prior (EUR 5.5 million) but at the same level as 2016 with nearly the same number of average employees in those years. In particular, bonuses paid to the Executive Board and employees were much higher in 2018 than in 2017. These bonuses rewarded the high individual and collective levels of target achievement of the workforce in the year under review. These included the successful product development and certification in the field of liver cancer (HCCBloodTest) and the establishment of automation solutions for Epi proColon processing, but also the CMS reimbursement rate of USD 192.00 after successful intervention, the oversubscribed rights issue and the achievement of important financial targets. Non-cash expenses from share-based payments in 2018 also exceeded the prior year figure by EUR 0.6 million.

In April 2018, we granted a total of 685,000 stock option rights to the Executive Board and Group employees. The rights derive partly from previous years' stock option plans, which were intended as an attractive incentive scheme for all employees, in particular senior management. The exercise price of the newly issued rights, which cannot be exercised before April 2022, has been set at EUR 4.12. We consider such long-term stock option programs to be a key instrument in aligning employees' and management's interests with corporate objectives and in motivating our staff. Details of this program and the stock option and phantom stock programs of previous years can be found in the notes to the consolidated financial statements for 2018.

REPORT ON EXPECTED DEVELOPMENTS AND ON OPPORTUNITIES AND RISKS

REPORT ON EXPECTED DEVELOPMENTS

Planned strategic direction of Epigenomics in the coming years

Over the next two years, we plan to continue to establish our Company as one of the premier global players for liquid biopsy-based cancer tests. The key success factors will be the successful commercialization of Epi proColon in the U.S. market and the continued development and launch of new products such as HCCBloodTest.

Over the short term, our commercial efforts in the U.S.A. will continue to be focused on inclusion in the guidelines issued by medical professional societies, and reimbursement by insurers. Over the medium term, our primary goals for the U.S.A. are to increase product awareness and obtain market approval for HCCBloodTest. As the first ever FDA-approved liquid biopsy test for cancer screening, we believe that the market opportunity is substantial. Our peer-reviewed, pub-

lished data for Epi proColon demonstrate that more than 99% of patients who had been non-compliant with previously available CRC methods were compliant with Epi proColon. These data demonstrate that increasing market awareness is critical as it will drive utilization. To process higher volumes more efficiently in the future, we are also able to provide our laboratory customers with automation solutions that include high and medium throughput options.

With our HCCBloodTest, we are attempting to establish our technologies in the field of liver cancer detection as well, most crucially in the U.S.A. and China. In the absence of any as-yet generally recognized standard of care for this area of application worldwide, we see a particularly good opportunity to quickly become the market leader in the field as soon as the test receives regulatory approval. To get to that point, however, we still have to invest time and money in clinical studies.

We will continue to address the European market opportunistically. In order to be more successful in this respect, we may have to engage in more partnerships or expanded partnerships in this area. Of course, success stories from the U.S.A. and China will be very helpful to us.

In line with our plans for the HCCBloodTest, our R&D activities will firstly focus on the existing product range in CRC and lung cancer products to develop successive generations of products with even greater performance. Secondly, we will expand our portfolio by broadening the scope of our proprietary biomarkers to related clinical applications.

We aim to maintain our leadership in DNA methylation technologies and to provide selected partners access to our know-how, expertise and IP in this field via licenses, patent sales, and/or services. Our goal remains to leverage proprietary products to further establish Epigenomics as the leading company for liquid biopsy-based cancer tests in the market, either directly or through commercial partnerships. We believe we have a solid foundation upon which to execute our corporate strategy.

Expected economic environment in the coming years

We expect overall economic conditions and the capital market environment in Europe and the U.S.A. to remain challenging. In light of the current performance of the global economy, we expect that uncertainty on the capital markets – especially in Europe – could persist in the near to medium term. Geopolitical conditions have become more complicated with the UK's exit from the EU (which will have no specific economic consequences for our Company) and the policies pursued by the new administration in the United States. The future global economic landscape is to a large extent dependent on the political environment.

Nevertheless, we also assume that whatever setbacks there may be, life sciences companies with a solid performance record should still be able to raise equity capital. It should also be taken into account that the percentage of GDP spent on healthcare will likely grow even in the developed world (especially in the U.S.A.), and will certainly increase in emerging countries like China.

The exchange rate between the U.S. dollar and the euro will remain extremely volatile. The markets are every bit as unsure where the rate will go in 2019 as they are about U.S. government policy. While some experts predict a weak euro and therefore a stronger U.S. dollar due to the crises playing out in the EU, others believe the euro will pick up quickly, with some even anticipating a rate of up to 1.40. With this in mind, we decided in line with previous years' practice to set our budget rate for 2019 at the effective exchange rate at the time the budget was drawn up (mid-November 2018), i.e., at EUR/USD 1.14.

Outlook on earnings

Our business projections for 2019 are based mainly on the commercialization of Epi proColon in the U.S.A.. The commercialization of this product depends primarily on securing reimbursement from public and private health insurers. At the same time, as part of the new contractual relationship, our marketing partner in the U.S.A., Polymedco, sees itself in a position to sell significantly higher volumes of test kits than in the reporting year, even without the costs being reimbursed. With this in mind, we anticipate significantly higher product revenue in 2019, which should range even without a reimbursement decision effect in 2019 from EUR 3 million to EUR 6 million. If approval is received for cost reimbursement as hoped for, the forecast may have to be adjusted.

As far as costs are concerned, on the one hand we expect higher R&D costs as against 2018 due to our studies in the U.S.A. (PERT and the liver cancer study) as well as other planned development activities. On the other hand, the marketing, sales and distribution activities slated for the prior year but not yet launched due to the delayed reimbursement decisions in the U.S.A. will remain on our agenda in 2019 and may result in additional expenditure.

Against the backdrop of the revenue and cost forecasts, we assume an operating loss again for 2019. EBITDA before share-based payment expenses should, in our assessment, still range from EUR -11.5 million to EUR -14.0 million for fiscal year 2019, as was the case in the prior-year forecast.

Outlook on financial position

Based on our business plans for 2019, we expect cash consumption in line with our EBITDA guidance (before share-based payment expenses), even if going forward, cash inflows from rental and lease agreements no longer impact EBITDA as a result of IFRS 16. The planned cash expenditures for 2019 are related to our commercialization activities in the U.S.A., clinical studies such as first and foremost the PERT study, and ongoing R&D activities.

We ended the 2018 fiscal year with EUR 17.1 million in cash and marketable securities. While current financial resources are sufficient at our projected cash consumption to support the Company's operations well beyond 2019, we will raise additional capital if necessary in 2019. These additional funds would be utilized to extend operations in 2019 and beyond and/or increase our investment in certain areas based upon market conditions and opportunities.

Outlook on non-financial performance indicators

Our objective for fiscal year 2019 remains to obtain positive reimbursement decisions for the commercialization of Epi proColon in the U.S.A., which we had initially expected in 2018. The inclusion of Epi proColon in further CRC guidelines issued by medical professional societies is an important prerequisite for reimbursement by payors in the U.S. healthcare system. Moreover, we plan to continue with recruitment for the post-approval study.

In R&D, in addition to automated solutions for Epi proColon, we also intend to complete our NGS panels for lung cancer and CRC and to clinically validate them with plasma samples. Further clinical data and respective publications are expected on liver, bladder and prostate cancer.

Mid-term opportunities

The market opportunities in the fields of CRC and liver cancer in the U.S.A. and other global markets are considerable. With regard to Epi proColon, in fiscal year 2019 we will continue to focus on inclusion in the screening guidelines of medical professional societies and on reimbursement. Successfully reaching these milestones will position Epigenomics for significant test volume and revenue growth over the next two to five years. We also expect our HCCBloodTest for liver cancer screening to be approved for marketing in the medium term, not only in the U.S.A., but also in China. Based on the study data to be collected in the next two to three years for this product, we believe it too will bring in rapidly growing revenue once approved. Measurable sales are also anticipated during that time in Europe, where the CE marking theoretically makes it possible to market the product already.

Establishing a leadership position in innovative liquid biopsy tests for cancer screening allows us to work towards launching further pioneering products on the market going forward.

There are significant market opportunities for further cancer screening tests beyond the CRC, liver and lung cancer blood tests already developed by Epigenomics. We are currently identifying new biomarker opportunities for various cancers such as bladder cancer. In addition, we are also investigating these biomarkers with respect to sequencing by means of various platform technologies.

For our shareholders there is the opportunity to see the enterprise value increase from catalytic events, primarily the successful marketing of our products in the U.S.A. and also additional licensing partnerships or other forms of commercial success.

Overall outlook for the Epigenomics Group

Epigenomics is a leader in the research and development of liquid biopsy tests for cancer detection. The reimbursement we seek for our lead product Epi proColon in the U.S.A. offers the opportunity to open up innovative CRC screening to a wide range of patients, saving lives.

Following a positive reimbursement decision, we expect to generate significant growth in the coming years. The CRC screening opportunity in the U.S.A. alone represents a target market of over 30 million unscreened patients. The HCCBloodTest is another product that we launched in the reporting year and that promises noticeable positive contributions to our financial results, at least in the medium term. We are building a foundation on which we can increase test volume and revenue as well as develop additional products and launch them on the market, thus giving us the opportunity to become a global leader in molecular diagnostics.

In order to ensure our ability to continue as a going concern, sufficient liquidity has to be maintained and/or additional liquidity secured. We aim to have liquidity to finance at least one year's operations at all times. Currently, we still rely on the capital markets to raise equity and debt financing from time to time and expect that we will have to make use of this alternative again in the near future. In order to not have to rely exclusively on capital market financing for our business operations, we will continue to evaluate other reasonable strategic options for our further development.

REPORT ON OPPORTUNITIES AND RISKS

Risk management system

Epigenomics is a globally operating cancer molecular diagnostics company and, as such, subject to many industry and company-specific opportunities and risks. In line with the German Corporate Control and Transparency Act (Gesetz zur Kontrolle und Transparenz im Unternehmensbereich – KonTraG), Epigenomics has an established, comprehensive and effective system to enable early identification, assessment, communication and management of opportunities and risks across all of its functions and operations. The underlying principles and guidelines have been documented in a Group-wide Risk Management Policy. The goal of this policy and all related instruments is to 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. The risk management system is regularly discussed and refined on an ongoing basis at the operational level, senior management level and the Executive Board and Supervisory Board levels. The core principles are transparency of risks and opportunities across all functions and operations, interactive evaluation of these risks and opportunities and a culture of seizing opportunities and accepting risks as an integral part of doing business in cancer molecular diagnostics, but doing so responsibly and striving for an optimal balance between opportunities and risks.

Every risk has a clearly identified risk owner whose responsibility it is to continuously monitor and control risks as well as manage the implementation of any countermeasures. At quarterly intervals, these risk owners report to the corporate risk manager who communicates the risks to the Executive Board, which in turn reports to the Supervisory Board. In case of any material risk, this risk is immediately brought to the attention of the corporate risk manager and discussed at the appropriate board levels. Significant risks and the risk management system itself were also discussed in broader management groups as well as between the Company's auditor and the Supervisory Board throughout the year.

Our management structure, our organizational measures for identifying and assessing opportunities and risks, the monthly internal and the quarterly external reporting and our control systems therefore all form an integral part of the overall risk management system which is standardized across all functions and locations. All of these tools are regularly monitored for effectiveness and optimized. They are also reviewed by our external auditor and the Supervisory Board.

Alongside the opportunities that our business model offers, there are a number of significant risks to which Epigenomics is exposed, which individually or when combined could permanently impact our results of operations, financial position and net assets, as well as our share price. The main opportunities and risks are described below.

Business-related opportunities and risks

Epigenomics offers three blood-based IVD products in specific markets: Epi proColon, an FDA-approved and CE-marked CRC screening test; Epi proLung, a lung cancer reflex test based on bronchial lavage (also CE-marked); and HCCBloodTest used to screen for liver cancer, which received CE marking at the end of the reporting year. To date, however, the product revenue from Epi proColon has been relatively moderate, and the market for the other two products still has to be developed and tapped into. Following our decision to focus the organization and its commercial activities on the key markets of the U.S.A. and China for our lead product Epi proColon, regulatory approvals and reimbursement decisions in these countries are crucial for us to be able to generate revenue from product sales in conjunction with our partners and licensing agreements with third parties.

Our ability to grow revenue from our products will depend, among other factors, on the successful marketing and commercialization of our tests with key stakeholders in the healthcare industry. We have entered into a commercial partnership with Polymedco, a well-established and experienced U.S. company that has been successfully marketing and selling diagnostics tests in North America for years. 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. This collaboration can therefore be seen as a strategy of reducing the risks associated with developing a market independently and from scratch. Nevertheless, even with such an experienced partner, there are still risks remaining with regard to commercialization. In the end, we have to rely on our ability to create sufficient customer acceptance for our product as soon as possible. We not only have to address the screening population itself, but also have to generate support in the medical and laboratory customer communities. To this effect we have extended our network in the medical community over recent years, in order to gain support for our product from key opinion leaders in the field. However, there is no guarantee that all of those involved can be convinced of the advantages of a blood-based early detection test.

An important element in being commercially successful is the availability of reimbursement for Epi proColon testing by insurance carriers including Medicare. Securing Medicare coverage at an acceptable reimbursement rate is an opportunity for the Company, as the Medicare population represents around 40% of our available market in the U.S.A.. The risk of negative reimbursement decisions would also have an impact on the decisions of other major payors in the U.S. health system.

Reimbursement risk is also related to inclusion in various CRC screening guidelines issued by medical professional societies. Payors and health systems use these guidelines as inputs for their payment determinations and exclusion or limited inclusion therefore pose a risk to reimbursement and market acceptance.

Considering the lack of standardized reimbursement rules in Europe, the market acceptance of our main product in the different European markets will remain moderate for the foreseeable future. However, a positive reimbursement decision in any European country represents a significant opportunity for the product in that market. At this point, though, we have no indication of reimbursement negotiations for products like ours taking place on a broader scale in any of the major European countries.

Under our business model, we are partly dependent on large diagnostic companies and reference laboratories to develop, commercialize, sell and distribute our products and licensed products based on our biomarkers and technologies. To ensure that our partners do their utmost to successfully commercialize these licensed products, we will continue to support them with all our expertise and know-how. Being dependent on the commercial success of our partners remains a risk factor, particularly as they may realign their priority activities in line with their internal strategic decisions. This risk can only be mitigated through diversification in the selection of our partners.

In our efforts to be able to sell our products – either directly or through partners – in the laboratory market in the U.S.A. and other countries, we have established relationships with contract manufacturers and vendors of specialized reagents to ensure an adequate supply of our product at any time. The ability of our manufacturing partners to provide us with sufficient quantities of product at quality levels mandated by regulatory authorities poses a potential risk to the Company. A failure on the part of any of these partners or product vendors could lead to us being unable to supply products to the market and thus negatively impact our ability to generate revenue. In order to mitigate this risk we work with highly capable companies in this field, with ample experience and a track record of providing high-quality products to diagnostic companies.

In most markets, the performance of the Epi proColon test is restricted to certain instruments specifically detailed in our regulatory filings. We are therefore dependent on these instruments being available to laboratory customers who buy the test from our partners or from us directly. Any changes in the products offered by these laboratory instrument manufacturers might limit the ability of our customers to order the test from us. This again would pose a risk of us not being able to generate revenue and thus negatively impact our financial performance. To mitigate this risk, we are constantly observing the market, are in dialog with instrument manufacturers and remain prepared to validate our diagnostic products on other instrumentation platforms in order to be able to react to any changes with respect to instruments being sold and installed at our customers' laboratories.

Ahead of applying for PMA approval with the FDA in the U.S.A., we also entered into licensing agreements with selected reference laboratories in North America, which have introduced their own versions of Septin9-based LDTs (laboratory-developed tests) in the U.S. market. Since 2011, Quest has offered LDT ColoVantage to aid detection of CRC and since the end of 2016 has been the only U.S. lab still marketing an LDT version of Septin9. We are in discussions to convert Quest to the FDA-approved version of the test, as already done by our partner ARUP. The risk remains that such a transition might not occur, which would limit our ability to fully capture the economic benefit of our technology given that this LDT license agreement is not as attractive as the ability to directly sell our products to laboratory customers.

The area of CRC screening has seen intense competition in recent years. Some competitors have made progress in developing other non-invasive CRC screening tests, although most of them are offering these as LDT services. It is important that we and our partners defend the lead position established in terms of clinical validation with the only FDA-approved CRC blood test.

Epigenomics' future success partly relies on the experience and expertise of the management and personnel, which represents a decisive competitive advantage for the Company. Our ability to retain the current level of expertise through key employees in the Company and to be able to recruit such expertise as might become necessary remains a critical success factor and could impact the future results of operations and financial position. Management has implemented a retention plan in the form of share-based payment incentives with the objective of securing long-term commitment from key employees.

In order to achieve successful commercialization of our products and continue development of our next generation products, the business must be appropriately capitalized. Without the necessary capital the business could be at risk of not achieving our corporate goals.

IP-related opportunities and risks

Our business relies heavily on commercializing our intellectual property as well as on licenses based on our know-how, licenses to third-party patents and our own patent applications. Any negative impact on the scope, duration, depth and breadth of any single claim granted, on their regional coverage, on competing IP that we might depend on, as well as difficulties in enforcing protection, inadvertent infringement of other IP, preventing others from infringing our IP, our inability to in-license key IP, etc., would negatively impact our cost base, our competitiveness and our ability to commercialize our products and to enter into partnerships, our revenue and ultimately our earnings and overall commercial success.

In light of this, we face the possible risk of a challenge to the validity, ownership or enforceability of our patents in court. It may happen that a competitor successfully challenges our patents or that a challenge results in limiting the coverage of our patents. As a result, we could lose important patent protection for our technologies and we could lose the ability to prevent others from utilizing these technologies without compensating us. In fact, a competitor had already contested our technology patents in China in the reporting year. Litigation itself could result in substantial costs, delay the commercialization of our products and could divert our management's attention and resources.

It is our experience that the Chinese market – which is very important for us – is hard to monitor from the outside, whether due to complexity caused by its sheer size or other factors such as language barriers. Thus when intellectual property rights are ultimately found to have been infringed, the process of defending our rights and rejecting and prosecuting the infringer can prove drawn-out and costly.

Since, over recent years, we have moved our business from exclusively developing new products to also marketing and selling our existing products launched in Europe, patent protection is now even more important to prevent competitors from launching competing products based on our biomarkers. To this end, we have also conducted extensive freedom-to-operate analyses for our U.S. product, yielding satisfactory results, at least for the time being. Further freedom-to-operate analyses will be conducted as soon as new products or changes to existing products are planned and such analyses become appropriate. As a precautionary measure, we constantly monitor the status of patent applications deemed to be relevant and work closely with our IP lawyers to ensure the best possible protection of our IP rights in light of ongoing developments in the field.

We consider the extensive patent protection on our biomarkers and underlying technologies to be a competitive advantage over many of our competitors. While other companies partly rely on generic technologies or products, we have the distinct advantage of having secured an extensive proprietary intellectual property position, setting us apart from other companies in the field of DNA-based diagnostics. This puts us in the position of being able to commercialize our own products while limiting the business risk of competition, even by larger companies in the field.

At the same time, the progress made in managing our IP portfolio and obtaining several key patents for cancer testing (such as our Septin9 and SHOX2 biomarkers) puts Epigenomics in a unique position to provide attractive licensing opportunities for the growing number of commercial players active in DNA methylation. This opportunity has been underscored by numerous licensing deals in the past several years.

Opportunities and risks related to the regulatory environment

The regulatory environment in the U.S.A. and the rest of the world is challenging. In the U.S.A. in particular, the Trump administration has a stated goal of repealing and replacing the Affordable Care Act and has already taken the first steps in doing so. While we believe the consequences will be beneficial to neutral for our FDA-approved product, it is still an unknown and a risk.

The regulatory environment for cancer molecular diagnostics in the U.S.A. is complex, poses high barriers for new products to enter the market, and is affected by numerous entities including the FDA, CMS, United States Preventive Services Task Force (USPSTF), and Congress. New or modified regulations from any of these entities could have a material impact on our business. We utilize both internal and external resources to monitor the activities of these organizations, and to react where necessary in order to mitigate the corresponding risks.

Epi proColon has received a PMA, and therefore passed the highest and most difficult approval hurdle in the U.S.A.. Any change in the regulatory landscape which would make it easier for competitors to develop and commercialize LDTs/homebrew assays, and therefore to compete against companies with PMA-approved products, would also pose a risk for our business.

In parallel, there are increasing trends towards tightening regulatory standards on the Chinese and European markets. As mentioned for the U.S.A. above, we have always chosen the regulated path to commercialization of our products. Given the high regulatory and quality standards under which we operate, going forward we consider this approach to be a competitive advantage over those companies which do not or cannot comply with these requirements.

Financial opportunities and risks

As of December 31, 2018, our available liquidity (cash, cash equivalents and marketable securities) amounted to EUR 17.1 million. Management is aware of the risk of having limited liquid assets to appropriately sustain the operations of the business. In 2018, as in previous years, we repeatedly demonstrated that additional financial resources are accessible to us, even under difficult conditions. With the current funding and based on our business strategy for the months to come, our cash runway is expected to reach into the second quarter of 2020. Even in case of favorable reimbursement decisions by payors in the U.S.A. for Epi proColon, it cannot be expected that we will generate sufficient income from product sales quickly enough to reach the cash break-even point before the end of that runway. A lack of alternative cash inflows from financing activities before that point in time jeopardizes the Company's ability to continue as a going concern. In such a scenario, while running out of funds, the Company would have to file for insolvency. In order to mitigate the risks associated with the launch of our product, we will continue to evaluate all strategic options including the option of raising additional capital in the markets at any time throughout 2019.

As a listed company, the capital market is, of course, both an opportunity and a risk for us. The opportunity lies in being able to raise fresh capital from time to time via this market, both from existing and new investors. Between 2013 and 2018, this opportunity was seized every year and through various transactions (rights issues, private placements, convertible bond issues) we were able to raise almost EUR 76 million in fresh capital over these six years. The market environment before or during the transactions was not always in our favor. However, there is of course also a risk here, as the price of our share is constantly exposed to the market. This means that the price does not necessarily have to react positively even in the event of success reports from us, because, for example, a negative overall market can overcompensate for our success reports. Even more so, however, a lack of success reports from us or even negative reports as well as declining investor interest can have a strong impact on our share price and put it under pressure. This was again clearly evident in the year under review. At the end of the year, our share was quoted at only EUR 1.77. With a low and/or falling share price, investors' willingness to subscribe for new shares decreases on the one hand, and the potential capital inflow from a new issue of shares is reduced on the other. Should the share price even fall below the nominal value of a share of EUR 1.00, such a capital increase would not be feasible at all for the time being. Such a scenario therefore also poses a risk to the continued existence of the Company, as it could result in insolvency.

After what proved to be a positive reimbursement decision for us and the successful progress made in launching Epi proColon on the U.S. market, we expect to be able to generate more income from product sales, which would help in reducing our operating loss over time. By contrast, if the demand for our product is below expectations and/or reimbursement decisions are delayed or are not taken in our favor, we would face the risk of further deterioration of our short-term financial position. Under such circumstances, this could result in lower numbers of tests sold and/or in lower than planned prices for the test, which as a consequence could make us miss our revenue, margin and/or earnings targets.

To avoid a costly setup of an internal production site and the maintenance of such a facility and qualified staff to meet the required GMP standards, we currently do not manufacture the Epi proColon test kits ourselves, but have outsourced these activities to contract manufacturing providers. Thus, we are exposed to the risk of dependence on our contract manufacturers. Ahead of the market launch of Epi proColon in the U.S.A., we addressed this risk by additionally implementing the manufacturing processes with a qualified alternative supplier capable of producing the test kits for us with the same quality in a relatively short amount of time should our primary supplier experience interruptions in production. This investment and the binding of resources are deemed appropriate as a risk mitigation strategy.

At the same time, the assembly of our test kits requires specific consumables and materials from audited suppliers of such goods. We cannot easily replace these consumables and materials or their suppliers in the event of delivery or quality problems, since the new vendor would require qualification in accordance with regulatory specifications. In the event of such a problem, any solution would be costly and time-consuming and could impede our ability to provide timely delivery of our products to customers.

As a Germany-based global company which reports in euros and has operations in the U.S.A., we are exposed to foreign exchange rate risks, predominantly stemming from the euro/U.S. dollar exchange rate. In the future, our partners' and distributors' net sales generated in U.S. dollars outside the eurozone and our expected royalties and profit shares may also be subject to exchange rate risks. We regularly monitor these risks and evaluate on a case-by-case basis whether hedging transactions are required to reduce our exposure to them. Additionally, it should be mentioned that transactions in foreign currencies might entail opportunities as well.

In line with its protectionist "America First" policy, the Trump administration is still considering punitive tariffs on products manufactured abroad but sold on the U.S. market. This also poses the risk that, going forward, the test we have manufactured in Europe to date could be faced with tariffs when exported to the U.S.A., and that we might not be able to pass the costs on to our customers. Although we have yet to see any signs that companies of our size or from our industry (diagnostics) – or German companies in particular – could be threatened, we are still keeping a close watch on the political developments in the U.S.A. and will establish alternative strategies for a scenario in which we are hit by such a protectionist measure. In principle, we would be able to rapidly relocate production of our test kits intended for the U.S. to the U.S.A..

We have reduced our portfolio of available-for-sale securities over recent years down to a single remaining item. The historical investment in this remaining item was made in compliance with the Company's investment policy, which was approved by the Supervisory Board. This policy stipulates that investments may only be made in items with an "investment grade" rating. Our securities portfolio is exposed to price risks – in the form of interest rate, issuer and market-related impairment risks – and liquidity risks. Under specific market conditions it could be difficult or impossible to liquidate the securities in the short term at their fair value – regardless of whether or not the issuer has a good rating. We have not made any investments in securities in recent years, and as part of our risk mitigation strategy have invested exclusively in money market instruments (i.e., demand deposits, daily and time deposits) on euro or U.S. dollar basis to maximize the availability of liquidity. At the same time, we accept the lack of returns that can be generated in the money market due to the persistently low interest rates. In 2019 and going forward, we will continue to maintain as much of our liquid assets in the form of cash and the most secure cash equivalents possible.

Other opportunities and risks

We continuously monitor all applicable environmental, health and safety, operational and other applicable statutory and industrial guidelines, and have implemented functions to comply with all of these effectively at each of our business locations. To minimize the potential impact from a variety of tax, corporate, employment, competition, IP and other legal frameworks, we base our decision-making and design of our policies and processes on the advice of internal experts and recognized external advisors in each of these areas. Wherever expedient and appropriate, we recognize provisions to cover any potential liability. There are also risks that are directly associated with our share price development. Comparatively low levels of liquidity in the stock, very high volatility based on all of the factors described above, as well as external influences and negative perceptions by others pose a risk of being wrongly assessed by capital markets participants (particularly analysts and investors). This could lead to unjustified stock sales by shareholders and to a sharp decline in our share price, which could negatively impact the capital market's perception of us as a listed company. At the same time, the volatility in our share price represents an opportunity to continuously find new investors willing to take the risk of an investment in the Company, even in more challenging times. In order to seize this opportunity, we maintain an active dialog with market participants and the Company's shareholders through our investor relations efforts.

There could potentially be other risks as well as significant opportunities beyond those described here that we currently either deem of lesser importance or of which we were not aware of when preparing this Group management report. For a more detailed presentation, of the risks in particular, please also refer to the prospectus that we issued in connection with the capital increase carried out in October 2018. This is available on our website (*www.epigenomics.com/capital-increase-2018/*).

Summary of the opportunity and risk situation of the Epigenomics Group

The commercial opportunities and risks arising for our lead product, Epi proColon, in the U.S.A. are still dominated by issues surrounding potential reimbursement and inclusion in the screening guidelines issued by medical professional societies. We are not alone in believing that broad market penetration and therefore commercial success for our product in the U.S.A. depends on inclusion in the corresponding guidelines and a positive reimbursement decision at an appropriate rate. Failure to obtain favorable reimbursement for our product as well as lack of market acceptance and penetration in the U.S.A. based on lack of inclusion in medical guidelines or for any other reason, would have a material impact on our results of operations, financial position and net assets, and our ability to raise further capital.

Even if we are successful in the process of achieving guideline inclusion and reimbursement in the U.S.A. described above, we still face the risk that each or all of these steps could take longer than anticipated, thus resulting in slower than expected commercial adoption. In order to compensate for further potential delay in U.S. market penetration, we will further accelerate commercial efforts in other countries and reinforce the support we provide to our partners there. Based on the medical need prevailing in most of the countries around the world we address with our products, there are still major untapped commercial opportunities which we have to make maximum possible use of.

Despite the funds raised on the capital markets in recent years, as a company with significant commercial challenges and opportunities we remain constrained in our financial resources. This limits our ability to cope with potential additional hurdles in attaining a positive reimbursement decision and in our commercial activities. Ultimately, we see our ability to access additional capital to reach our commercial goals as an opportunity to mitigate illiquidity risk which could jeopardize the Company's ability to continue as a going concern. A failure to raise capital to appropriately fund business operations might however lead to a total loss of value in our stock.

CORPORATE GOVERNANCE

For the Executive Board and the Supervisory Board of Epigenomics, corporate governance lies at the heart of responsible and ethical management. The Executive Board and the Supervisory Board maintained a very active exchange throughout 2018 in order to generate long-term value for our shareholders. This represents a key element of sound corporate governance. Moreover, openness and transparency in our corporate communications with shareholders, employees, the authorities, the general public and other stakeholder groups represent an overarching principle in our approach towards sound corporate governance.

We welcome the German Corporate Governance Code (also referred to below as the "Code") and we systematically and regularly monitor compliance with the German Corporate Governance principles, making amendments wherever possible to ensure fair and responsible corporate management in line with the most recent version of the Code.

In certain aspects, Epigenomics' corporate governance principles go above and beyond the legal requirements and the recommendations of the Code. For example, we have established binding internal guidelines on insider trading and made these part of all employment agreements. Corporate governance compliance matters are overseen by our Manager Legal Affairs, who ensures adherence to the corporate governance principles. The Manager Legal Affairs maintains a regular dialog with the Executive Board and the Supervisory Board on all compliance-related matters.

While, going forward, we are clearly committed to adhering to the Code to the furthest extent possible, there are a few exceptions based on certain Company-specific factors and peculiarities where we chose or had to deviate from the Code.

2018 DECLARATION OF COMPLIANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE PURSUANT TO SECTION 161 OF THE GERMAN STOCK CORPORATION ACT (AKTG)

Pursuant to section 161 of the German Stock Corporation Act (Aktiengesetz – AktG), each year the Executive Board and the Supervisory Board of Epigenomics AG as a listed company have to explain which recommendations of the German Corporate Governance Code were or were not complied with.

The Executive Board and the Supervisory Board of Epigenomics AG hereby declare that, since the last declaration of compliance in October 2017, 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 (published by the Ministry of Justice in the official part of the Federal Gazette on April 24, 2017), with the exceptions set forth below. References to sections, paragraphs and sentences of the Code relate to the version of the Code of February 7, 2017 (published by the Ministry of Justice in the official part of the Federal Gazette on April 24, 2017).

Section 3.8 paragraph 3

Epigenomics AG has taken out a D&O policy. The policy includes as insured persons also 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 consider such a deductible as inadequate 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

At Epigenomics AG there exists no separate call system which the 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 pursuant to section 4.1.3 sentence 3 which has been introduced by the version of the Code that was published by the Ministry of Justice in the official part of the Federal Gazette on April 24, 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

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, 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 and will not comply with these recommendations of the Code.

Sections 5.3.1 sentence 1, and 5.3.3

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 recommendations pursuant to sections 5.3.1 sentence 1 and 5.3.3 continue not to be complied with.

Berlin, October 2018

On behalf of the Supervisory Board

Heino von Prondzynski
(Chairman of the Supervisory Board)

On behalf of the Executive Board

Greg Hamilton
(CEO)

Jorge Garces
(COO)

Albert Weber
(EVP)

This statement has also been made permanently accessible to the general public in German and English on the Company's website under *www.epigenomics.com/news-investors/corporate-governance*.

DECLARATION OF GOVERNANCE

In accordance with section 289a of the German Commercial Code (Handelsgesetzbuch – HGB), the Declaration of Governance has been made permanently accessible to the general public in German and English on Epigenomics AG's website under *www.epigenomics.com/news-investors/corporate-governance.*

KEY FEATURES OF THE INTERNAL CONTROL AND RISK MANAGEMENT SYSTEM RELATED TO THE GROUP ACCOUNTING PROCEDURES OF THE COMPANY

The internal control and risk management system (ICR) of Epigenomics has been set up by the Company's Executive Board, which also takes responsibility for it. The ICR is not defined as a comprehensive standardized system across the Company as a whole, but rather the scope of control and intensity are adjusted according to the respective risk. In addition, control options are used at all Company levels and supervision by management is ensured. Epigenomics has developed an individual top-down approach for Company-wide controls and supervision, including verification of effectiveness. The flexible structure of the reporting system – supported by established tools and adjusted to the Company's needs – ensures transparency and targeted supervision by the internal control system. Financial and non-financial indicators are taken into account.

The Supervisory Board and the Executive Board continuously monitor the ICR. Apart from the true and fair view presented by the financial reporting it also ensures the efficiency and cost-effectiveness of the daily business as well as compliance with relevant regulations and internal guidelines. The supervision of the accounting procedures goes hand in hand with the monitoring of the ICR.

Within the organization of the Company, there are various departments and employees involved in developing, coordinating and monitoring control measures. The risk management function and controlling as well as quality departments are of major importance here. Due to its small size, the Company has not yet established an internal audit function.

The adequacy and the effectiveness of the ICR are continuously ensured by discussions with relevant employees, by benchmarking with other organizations and also by way of a regular dialog with the Company's auditor and consultations with the Company's lawyers as required. Regular further training measures for employees and internal team meetings ensure that legal changes are anticipated at an early stage and implemented in accordance with regulations.

The Epigenomics Group has established the principle of separation of functions as far as reasonable in a commercial organization with a limited number of employees. This principle is supplemented by the principle of dual control. Neither Executive Board members nor any employees are authorized to represent and sign on behalf of the Company on their own.

For routine internal activities, instructions and regulations are provided where possible. Those instructions and regulations can be found within so-called "standard operating procedures" (SOPs) as well as in guidelines such as an employee's manual, detailed job descriptions, a travel policy or an accounting manual. The guidelines have been made permanently accessible to all concerned employees of the Company via the intranet. All guidelines are checked continuously and amended if necessary. Legal advice from experts is taken as needed to ensure conformity of the internal regulations with the applicable legal requirements or regulations.

The Company's management and controlling system is primarily based on various planning, monitoring and reporting tools. Qualitative information is derived from an internally-developed project documentation database, and quantitative information is processed by all Group entities using Microsoft Dynamics Navision™, a widely used enterprise resource planning (ERP) software program. Our accounting and controlling departments provide all relevant management and controlling information to the Executive Board on a monthly basis. The ongoing training of the team members is ensured.

For internal management and control purposes, we set up an annual budget, usually based on the current long-term strategic business plan of the Company and a corresponding set of goals. The budget is developed bottom-up from all cost centers and R&D projects. All budgets are extensively reviewed internally by the senior management team and the Executive Board, and a final approval of the annual budget by our Supervisory Board is mandatory. The primary focus of our regular internal management reporting lies in comparing actual versus budgeted values for a comprehensive set of metrics. From these, we compile the external quarterly reports. These are usually accompanied by an internal forecast, which provides us with an updated estimate of expected

full-year results and performance vis-à-vis target numbers and public guidance. Actual versus budget comparisons of financial performance indicators are also prepared on a regular basis within the framework of the internal reporting system and are reported monthly to the senior management team of the Company. The focus is on cost and liquidity control. Deviations versus budget or historical values are analyzed on a short-term basis and supplemented by a presentation of alternative options. The reporting is supplemented as needed with additional data requested by the Supervisory Board or the Executive Board as well as the controlling team.

The Company's assets are tested for impairment on a regular basis in accordance with the appropriate accounting standards or if there are indications of possible impairment.

REMUNERATION REPORT

Composition and remuneration of the Executive Board

The Executive Board of Epigenomics AG is responsible for independently managing and running operations, developing and implementing corporate strategy and budgetary planning, appointing and guiding senior management and overseeing the general management of the Company. There is a continuous and intensive dialog between the Executive Board and the Supervisory Board and their respective members. In its charter, the Executive Board has been given a clear set of rules and procedures for certain actions and decisions that require Supervisory Board approval.

Mr. Greg Hamilton has served as the Company's Chief Executive Officer (CEO) since July 1, 2016. The current service agreement with Mr. Hamilton has a term until December 31, 2021. During the reporting year, the Executive Board also included Jorge Garces, Ph.D., who joined the Company on December 1, 2017 as its President and Chief Scientific Officer (CSO). The service agreement with Mr. Garces has a term until December 31, 2020. Mr. Albert Weber joined the Company's Executive Board on January 1, 2018 as Executive Vice President Finance (EVP Finance). Dr. Uwe Staub was also a member of the Executive Board and Chief Operating Officer until stepping down on March 31, 2018.

The total remuneration of the members of the Company's Executive Board is reviewed by the Supervisory Board annually and is compared against 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 comprises both a fixed component and variable components. The variable components are determined on the basis of a variety of criteria, which are set by the Supervisory Board on a yearly basis, e.g., the achievement of individual performance targets and/or Company performance targets. In addition, Mr. Hamilton and Mr. Garces are entitled to reimbursement of their travel expenses from their permanent addresses in San Diego to the Company's headquarters in Berlin and the related accommodation costs there. Their package of fringe benefits includes an annual car allowance, a 50% matching contribution of the Company in a 401k plan in the U.S.A., various insurance policies and reimbursement for legal and tax advice expenses and the communications costs associated with them working from their country of residence. In 2017, Mr. Garces also received a one-time signing bonus which is required to be repaid on a pro rata basis if his service agreement is terminated prior to December 31, 2019 (exception: termination for cause). The Company pays Mr. Weber a contribution towards the cost of his health insurance, nursing care insurance and accident insurance as a fringe benefit.

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. Such rights are currently granted under the Company's stock option programs, which are described in detail in the notes to the consolidated financial statements for the reporting year.

The total position of all members of the Executive Board with regard to their stock option rights is shown in the following table:

Executive Board member	Program	Reporting year	Rights held as of Jan 1	Rights granted	Rights expired	Rights forfeited	Rights exercised	Rights held as of Dec 31	therof exercisable	Exercise price (weighted average) in EUR
Greg Hamilton	**SOP 16–18**	**2018**	**160,000**	**67,500**	**0**	**0**	**0**	**227,500**	**0**	**4.94**
		2017	91,580	68,420	0	0	0	160,000	0	5.29
	SOP 17–19	**2018**	**31,580**	**32,500**	**0**	**0**	**0**	**64,080**	**0**	**4.60**
		2017	0	31,580	0	0	0	31,580	0	5.10
	Total SOP	**2018**	**191,580**	**100,000**	**0**	**0**	**0**	**291,580**	**0**	**4.87**
		2017	91,580	100,000	0	0	0	191,580	0	5.26

Executive Board member	Program	Reporting year	Rights held as of Jan 1	Rights granted	Rights expired	Rights forfeited	Rights exercised	Rights held as of Dec 31	therof non-forfeitable	Exercise price (weighted average) in EUR
Jorge Garces, Ph.D.	**SOP 17–19**	**2018**	**0**	**85,000**	**0**	**0**	**0**	**85,000**	**0**	**4.12**
		2017	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Executive Board member	Program	Reporting year	Rights held as of Jan 1	Rights granted	Rights expired	Rights forfeited	Rights exercised	Rights held as of Dec 31	therof exercisable	Exercise price (weighted average) in EUR
Albert Weber	**SOP 16–18**	**2018**	**30,000**	**0**	**0**	**0**	**0**	**30,000**	**0**	**5.10**
		2017	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	SOP 17–19	**2018**	**0**	**70,000**	**0**	**0**	**0**	**70,000**	**0**	**4.12**
		2017	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Total SOP	**2018**	**30,000**	**70,000**	**0**	**0**	**0**	**100,000**	**0**	**4.41**
		2017	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Executive Board member	Program	Reporting year	Rights held as of Jan 1	Rights granted	Rights expired	Rights forfeited	Rights exercised	Rights held as of Dec 31	therof exercisable	Exercise price (weighted average) in EUR
Dr. Uwe Staub	**SOP 16–18**	**2018**	**22,500**	**0**	**0**	**22,500**	**0**	**22,500**	**0**	**5.43**
		2017	90,000	0	0	22,500	0	22,500	0	5.43
	SOP 17–19	**2018**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**n/a**
		2017	0	70,000	0	0	0	0	0	n/a
	Total SOP	**2018**	**22,500**	**0**	**0**	**22,500**	**0**	**22,500**	**0**	**5.43**
		2017	90,000	70,000	0	22,500	0	22,500	0	5.43

None of the Executive Board members' stock option rights expired in the reporting year and none were exercised. Moreover, none of the rights that they held on the reporting date were eligible to be exercised.

The exercise prices of the rights held by Mr. Hamilton range from EUR 4.12 to EUR 5.43. The "Exercise price (weighted avg.) in EUR" column in the table above shows the range of exercise prices of the other Executive Board members.

From 2013 until 2015, Dr. Staub and Mr. Weber received the long-term performance-based compensation in the form of phantom stock rights (PSRs). No other PSRs have been issued since 2016. The total positions of Dr. Staub and Mr. Weber with regard to their PSRs are shown in the following table:

Executive Board member	Program	Reporting year	Rights held as of Jan 1	Rights granted	Rights forfeited	Rights exercised	Rights held as of Dec 31	thereof exercisable	Exercise price (weighted average) in EUR
Albert Weber	**PSP 03-15**	**2018**	**2,400**	**2,400**	**0**	**0**	**0**	**0**	**n/a**
		2017	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PSP 2014	**2018**	**30,000**	**0**	**0**	**0**	**30,000**	**30,000**	**3.23**
		2017	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PSP 2015	**2018**	**10,000**	**0**	**0**	**0**	**10,000**	**10,000**	**5.05**
		2017	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Total PSR	**2018**	**42,400**	**2,400**	**0**	**0**	**40,000**	**40,000**	**3.69**
		2017	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Executive Board member	Program	Reporting year	Rights held as of Jan 1	Rights granted	Rights forfeited	Rights exercised	Rights held as of Dec 31	thereof exercisable	Exercise price (weighted average) in EUR
Dr. Uwe Staub	**PSP 03-15**	**2018**	**22,400**	**22,400**	**0**	**0**	**0**	**0**	**n/a**
		2017	28,800	6,400	0	0	22,400	22,400	3.43
	PSP 2013	**2018**	**20,000**	**0**	**0**	**0**	**20,000**	**20,000**	**6.15**
		2017	20,000	0	0	0	20,000	20,000	6.15
	PSP 2014	**2018**	**60,000**	**0**	**0**	**60,000**	**0**	**0**	**n/a**
		2017	60,000	0	0	0	60,000	60,000	3.23
	PSP 2015	**2018**	**14,400**	**0**	**0**	**0**	**14,400**	**14,400**	**5.05**
		2017	24,000	0	9,600	0	14,400	14,400	5.05
	Total PSR	**2018**	**116,800**	**22,400**	**0**	**60,000**	**34,400**	**34,400**	**5.69**
		2017	132,800	6,400	9,600	0	116,800	116,800	3.99

The "Exercise price (weighted avg.) in EUR" column in the table above also shows the range of exercise prices of the PSRs held by each member of the Executive Board.

In addition to the aforementioned remuneration components, the Executive Board members are beneficiaries of a D&O insurance policy with excess according to the statutory minimum amount, and receive full reimbursement of their business travel expenses from the Company in accordance with its general travel policy. In the individual case of a temporary incapacity to work due to illness, the Executive Board members will continue to receive their fixed salary for a maximum term of twelve months or up to the termination of their service agreement, respectively. In such case, any payments received under insurance policies as sickness benefit will be deducted from the fixed salary.

The service agreements of all Executive Board members contain post-contractual non-compete provisions for a period of twelve months after the respective service agreements end. During such period, at the decision of the Supervisory Board, Executive Board members are entitled to 100% of their last fixed compensation as a non-competition payment. The Supervisory Board may at any time, however, revoke the non-compete covenant (including after the respective agreement has ended). In the event of a change of control pursuant to the provisions of the German Securities Acquisition and Takeover Act (Wertpapiererwerbs- und Übernahmegesetz – WpÜG), the members of the Executive Board 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 respective service agreements. However, in no case would such payment exceed 150% of the severance payment cap in accordance with section 4.2.3 of the German Corporate Governance Code.

Total individual remuneration of the Company's Executive Board members[1]:

	Greg Hamilton, CEO since July 1, 2016			
Benefits granted in EUR	**2017**	**2018**	**2018 (min)**	**2018 (max)**
Fixed compensation	352,603	349,345	349,345	349,345
Fringe benefits	162,169	167,454	167,454	167,454
Total	**514,772**	**516,799**	**516,799**	**516,799**
One-year variable compensation	205,453	296,070	0	355,284
Multi-year variable compensation	188,600	149,384	n/a	n/a
share-based compensation	*188,600*	*149,384*	*n/a*	*n/a*
– PSP 03/15	*0*	*0*	*n/a*	*n/a*
– PSP 2013	*0*	*0*	*n/a*	*n/a*
– PSP 2014	*0*	*0*	*n/a*	*n/a*
– PSP 2015	*0*	*0*	*n/a*	*n/a*
– SOP 16–18	*129,040*	*100,834*	*n/a*	*n/a*
– SOP 17–19	*59,560*	*48,550*	*n/a*	*n/a*
non-share-based compensation	*0*	*0*	*0*	*0*
Total	**908,825**	**962,253**	**516,799**	**872,083**
Service cost	*0*	*0*	*0*	*0*
Total	**908,825**	**962,253**	**516,799**	**872,083**

[1] *The value of the share-based compensation in the table is measured by the fair value of the issued rights at their grant dates. Granted PSRs cannot be exercised before the end of a waiting period of three years after their issuance.*

	Jorge Garces, Ph.D., CSO since December 1, 2017			
Benefits granted in EUR	**2017**	**2018**	**2018 (min)**	**2018 (max)**
Fixed compensation	26,572	331,878	331,878	331,878
Fringe benefits	14,432	155,164	155,164	155,164
Total	**41,004**	**487,042**	**487,042**	**487,042**
One-year variable compensation	0	248,079	0	258,865
Multi-year variable compensation	17,226	199,521	n/a	n/a
share-based compensation	*10,555*	*119,474*	*n/a*	*n/a*
– PSP 03/15	*0*	*0*	*n/a*	*n/a*
– PSP 2013	*0*	*0*	*n/a*	*n/a*
– PSP 2014	*0*	*0*	*n/a*	*n/a*
– PSP 2015	*0*	*0*	*n/a*	*n/a*
– SOP 16–18	*0*	*0*	*n/a*	*n/a*
– SOP 17–19	*0*	*119,474*	*n/a*	*n/a*
non-share-based compensation	*6,671*	*80,047*	*0*	*80,047*
Total	**58,229**	**934,641**	**487,042**	**825,953**
Service cost	*0*	*0*	*0*	*0*
Total	**58,229**	**934,641**	**487,042**	**825,953**

	Albert Weber, EVP Finance since January 1, 2018			
Benefits granted in EUR	**2017**	**2018**	**2018 (min)**	**2018 (max)**
Fixed compensation	n/a	200,000	200,000	200,000
Fringe benefits	n/a	4,072	4,072	4,072
Total	**n/a**	**204,072**	**204,072**	**204,072**
One-year variable compensation	n/a	120,000	0	120,000
Multi-year variable compensation	n/a	97,933	n/a	n/a
share-based compensation	*n/a*	*97,933*	*n/a*	*n/a*
– PSP 03/15	*n/a*	*0*	*n/a*	*n/a*
– PSP 2013	*n/a*	*0*	*n/a*	*n/a*
– PSP 2014	*n/a*	*0*	*n/a*	*n/a*
– PSP 2015	*n/a*	*0*	*n/a*	*n/a*
– SOP 16–18	*n/a*	*0*	*n/a*	*n/a*
– SOP 17–19	*n/a*	*97,933*	*n/a*	*n/a*
non-share-based compensation	*n/a*	*0*	*0*	*0*
Total	**n/a**	**422,005**	**204,072**	**324,072**
Service cost	*n/a*	*0*	*0*	*0*
Total	**n/a**	**422,005**	**204,072**	**324,072**

	Dr. Uwe Staub, COO April 1, 2013–March 31, 2018			
Benefits granted in EUR	**2017**	**2018**	**2018 (min)**	**2018 (max)**
Fixed compensation	230,000	57,500	57,500	57,500
Fringe benefits	0	0	0	0
Total	**230,000**	**57,500**	**57,500**	**57,500**
One-year variable compensation	63,333	0	0	0
Multi-year variable compensation	190,711	0	n/a	n/a
share-based compensation	*190,711*	*0*	*n/a*	*n/a*
– PSP 03/15	*0*	*0*	*n/a*	*n/a*
– PSP 2013	*0*	*0*	*n/a*	*n/a*
– PSP 2014	*0*	*0*	*n/a*	*n/a*
– PSP 2015	*0*	*0*	*n/a*	*n/a*
– SOP 16–18	*190,711*	*0*	*n/a*	*n/a*
– SOP 17–19	*0*	*0*	*n/a*	*n/a*
non-share-based compensation	*0*	*0*	*0*	*0*
Total	**484,044**	**57,500**	**57,500**	**57,500**
Service cost	*0*	*0*	*0*	*0*
Total	**484,044**	**57,500**	**57,500**	**57,500**

	Greg Hamilton, CEO since July 1, 2016		Jorge Garces, Ph.D., CSO since December 1, 2017	
Allocations in EUR	**2017**	**2018**	**2017**	**2018**
Fixed compensation	352,603	349,345	26,572	331,878
Fringe benefits	162,169	167,454	14,432	155,164
Total	**514,772**	**516,799**	**41,004**	**487,042**
One-year variable compensation	130,373	228,646	0	174,672
Multi-year variable compensation	0	0	0	0
share-based compensation	*0*	*0*	*0*	*0*
– PSP 03/15	*0*	*0*	*0*	*0*
– PSP 2013	*0*	*0*	*0*	*0*
– PSP 2014	*0*	*0*	*0*	*0*
– PSP 2015	*0*	*0*	*0*	*0*
– SOP 16–18	*0*	*0*	*0*	*0*
– SOP 17–19	*0*	*0*	*0*	*0*
non-share-based compensation	*0*	*0*	*0*	*0*
Total	**645,145**	**745,445**	**41,004**	**661,714**
Service cost	*0*	*0*	*0*	*0*
Total	**645,145**	**745,445**	**41,004**	**661,714**

	Albert Weber, EVP Finance since January 1, 2018		Dr. Uwe Staub, COO April 1, 2013–March 31, 2018	
Allocations in EUR	**2017**	**2018**	**2017**	**2018**
Fixed compensation	n/a	200,000	230,000	57,500
Fringe benefits	n/a	4,072	0	0
Total	**n/a**	**204,072**	**230,000**	**57,500**
One-year variable compensation	n/a	0	64,000	64,000
Multi-year variable compensation	n/a	0	0	0
share-based compensation	*n/a*	*0*	*0*	*0*
– PSP 03/15	*n/a*	*0*	*0*	*0*
– PSP 2013	*n/a*	*0*	*0*	*0*
– PSP 2014	*n/a*	*0*	*0*	*0*
– PSP 2015	*n/a*	*0*	*0*	*0*
– SOP 16–18	*n/a*	*0*	*0*	*0*
– SOP 17–19	*n/a*	*0*	*0*	*0*
non-share-based compensation	*n/a*	*0*	*0*	*0*
Total	**n/a**	**204,072**	**294,000**	**121,500**
Service cost	*n/a*	*0*	*0*	*0*
Total	**n/a**	**204,072**	**294,000**	**121,500**

Dr. Staub, whose appointment to the Executive Board ended on March 31, 2018, received EUR 172,500 in compensation following the end of his term in 2018 for a post-contractual non-compete covenant still in effect in the current fiscal year.

Shares of the Company held by members of the Executive Board:

		Number of shares			
Executive Board member	Reporting year	held as of Jan 1	purchased	sold	held as of Dec 31
Greg Hamilton	**2018**	**0**	**2,500**	**0**	**2,500**
	2017	0	0	0	0
Jorge Garces, Ph.D. (since Dec 1, 2017)	**2018**	**0**	**1,000**	**0**	**1,000**
	2017	n/a	0	0	0
Albert Weber (since Jan 1, 2018)	**2018**	**100**	**0**	**0**	**100**
	2017	n/a	n/a	n/a	n/a
Dr. Uwe Staub (until Mar 31, 2018)	**2018**	**30,000**	**0**	**0**	**n/a**
	2017	30,000	0	0	30,000
Total Executive Board	**2018**	**30,100**	**3,500**	**0**	**3,600**
	2017	30,000	0	0	30,000

Composition and remuneration of the Supervisory Board

The Supervisory Board of Epigenomics AG consists of four 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 German and foreign undertakings:

  – Koninklijke Philips Electronics N.V. (Royal Philips Electronics), Eindhoven, Netherlands
  – Quotient Ltd., Jersey, UK, – Chairman
  – HTL-Strefa S.A., Warsaw, Poland (until July 2018)

- **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.

- **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)
  Independent Management Consultant 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 foreign undertakings:

  – ProteoMediX AG, Zürich, Switzerland
  – Indical Biosciences GmbH, Leipzig, Germany
  – tesa Labtec, Hamburg, 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.

Remuneration of the members of the Supervisory Board:

in EUR	Reporting year	Fixed remuneration	Variable remuneration	**Total remuneration**
Heino von Prondzynski	**2018**	**90,000**	**12,000**	**102,000**
	2017	90,000	12,000	102,000
Dr. Ann C. Kessler	**2018**	**40,000**	**12,000**	**52,000**
	2017	40,000	12,000	52,000
Prof. Dr. Günther Reiter	**2018**	**40,000**	**12,000**	**52,000**
	2017	35,000	12,000	47,000
Dr. Helge Lubenow	**2018**	**35,000**	**12,000**	**47,000**
	2017	35,000	12,000	47,000
Total Supervisory Board	**2018**	**205,000**	**48,000**	**253,000**
	2017	200,000	48,000	248,000

In addition, the members of the Supervisory Board were reimbursed for expenses totaling EUR 35 thousand in 2018 (2017: EUR 77 thousand).

Shares of the Company held by members of the Supervisory Board:

		Number of shares			
Supervisory Board member	Reporting year	held as of Jan 1	purchased	sold	held as of Dec 31
Heino von Prondzynski	**2018**	**140,000**	**105,000**	**0**	**245,000**
	2017	140,000	0	0	140,000
Dr. Ann C. Kessler	**2018**	**24,650**	**38,350**	**0**	**63,000**
	2017	24,650	0	0	24,650
Prof. Dr. Günther Reiter	**2018**	**0**	**0**	**0**	**0**
	2017	0	0	0	0
Dr. Helge Lubenow	**2018**	**6,000**	**0**	**0**	**6,000**
	2017	6,000	0	0	6,000
Total Supervisory Board	**2018**	**170,650**	**143,350**	**0**	**314,000**
	2017	170,650	0	0	170,650

FINANCIAL REPORTING

In line with fair and open disclosure and the requirements of the Prime Standard segment of the Frankfurt Stock Exchange, quarterly interim statements and half-year financial reports are made available within two months after quarter-/half-year-end and annual financial statements within four months after year-end. All information is made available simultaneously on our website *www.epigenomics.com*. All material news is announced following the latest guidelines and legal requirements on ad hoc notification.

ADDITIONAL MANDATORY DISCLOSURES FOR LISTED COMPANIES IN ACCORDANCE WITH SECTION 315A (1) OF THE GERMAN COMMERCIAL CODE (HGB)

In accordance with section 315a (1) of the German Commercial Code (Handelsgesetzbuch – HGB), the Company is required to report on certain structures governed by the German Stock Corporation Act (Aktiengesetz – AktG) and other legal frameworks, in order to provide a better overview of the Company and disclose any impediments to a takeover.

SHAREHOLDERS WITH DIRECT OR INDIRECT SHAREHOLDINGS OF MORE THAN 10% OF THE VOTING RIGHTS

Based on the information available, Deutsche Balaton AG, Heidelberg held 13.57% of the voting rights in Epigenomics AG as of the balance sheet date. Moreover, there were no additional shareholders with direct or indirect shareholdings of more than 10% of the voting rights.

COMPOSITION OF SHARE CAPITAL

As of December 31, 2018, the share capital of Epigenomics AG consisted exclusively of registered shares with equal rights with a par value of EUR 1.00 each. The total number of outstanding shares as of that date was 36,021,540.

Under section 136 AktG, shareholders are not entitled to vote in certain circumstances. We are not aware of any contractual restrictions related to voting rights or the transfer of shares.

LEGISLATION AND PROVISIONS OF THE ARTICLES OF ASSOCIATION GOVERNING THE APPOINTMENT AND DISMISSAL OF MEMBERS OF THE EXECUTIVE BOARD AND AMENDMENTS TO THE ARTICLES OF ASSOCIATION

The appointment and dismissal of members of the Executive Board is subject to the provisions of sections 84 and 85 AktG.

The Supervisory Board shall appoint members of the Executive Board for a maximum period of five years. It is permissible to appoint members to the Executive Board on more than one occasion or to extend their period of office, on each occasion for a maximum of five years.

The Executive Board may consist of one or more persons. The number of members of the Executive Board shall be determined by the Supervisory Board in accordance with the statutory provisions. The Supervisory Board may appoint a member of the Executive Board as its chairperson ("CEO") and one or more members of the Executive Board as his/her deputy/deputies. Deputy members of the Executive Board may be appointed. The statutory provisions regarding the amendment of the Articles of Association are governed in sections 179 to 181 AktG.

Pursuant to Article 14 of the Articles of Association, the Supervisory Board may adopt amendments or supplements to the Articles of Association if the changes are merely editorial in nature.

MATERIAL AGREEMENTS OF THE COMPANY SUBJECT TO THE CONDITION OF A CHANGE OF CONTROL FOLLOWING A TAKEOVER BID

(Such disclosure may be omitted if it could materially adversely affect the Company.)

Apart from the service agreements of the Executive Board members (see section "Composition and remuneration of the Executive Board" of this Group management report), the Company's phantom stock programs and the related agreements with the beneficiaries of these programs are also subject to any change of control. In the event of 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), the holders of vested PSRs become entitled to exercise these rights in full. This shall also apply if the waiting period for these rights has not expired yet. The PSR holder's right of exercise only applies, however, if the offered consideration exclusively comprises a cash settlement and if the bidder has gained control over the Company, i.e., has acquired at least 30% of the voting rights of the Company (section 29 (2) and section 30 WpÜG).

AUTHORIZATION OF THE EXECUTIVE BOARD TO ISSUE SHARES

Authorized Capital

Authorized Capital 2018/I and Authorized Capital 2018/II resolved by the General Shareholders' Meeting on May 30, 2018 were utilized in full in the course of the capital increase carried out in October 2018.

Conditional Capital VII

The share capital is conditionally increased by up to EUR 21,065.00 by means of issuing up to 21,065 new non-par value registered shares (Conditional Capital VII). 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.

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 until May 29, 2023 on the basis of the resolution of the General Shareholders' Meeting dated May 30, 2017 granting authorization to the Executive Board or by the Company or a subsidiary until May 29, 2023 on the basis of the resolution of the General Shareholders' Meeting dated May 30, 2018 granting authorization to the Executive Board, if option or conversion rights are exercised, if option or conversion obligations are discharged 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 are issued at the respective option or conversion price to be determined in accordance with the aforementioned authorization resolution of the General Shareholders' Meeting dated May 30, 2017 or the authorization resolution of the General Shareholders' Meeting dated May 30, 2018. 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 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 until May 29, 2023 on the basis of the authorization resolution of the General Shareholders' Meeting dated May 30, 2017 or issued by the Company or a subsidiary until May 29, 2023 on the basis of the resolution of the General Shareholders' Meeting dated May 30, 2018 granting authorization to the Executive Board, if option or conversion rights are exercised, if option or conversion obligations are discharged 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 commencement 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 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.

Conditional Capital XII

The Company's 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 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.

Berlin, March 20, 2019

The Executive Board

KEY FIGURES

– in accordance with the consolidated financial statements –

EUR thousand (unless indicated otherwise)	2014	2015	2016	2017	2018
Statement of Profit or Loss					
Revenue	1,507	2,082	4,201	1,864	1,533
Gross profit	776	907	2,567	1,618	1,093
EBIT	-8,383	-9,264	-12,312	-10,289	-12,895
EBITDA	-7,613	-8,596	-11,956	-9,946	-12,587
EBITDA before share-based payment expenses	-6,743	-9,352	-9,670	-9,369	-11,436
Net loss for the period	-8,854	-8,985	-11,161	-10,235	-12,692
Balance Sheet					
Non-current assets	2,352	1,822	3,019	2,914	3,553
Investments in non-current assets	911	200	379	548	106
Current assets	8,968	10,776	15,203	16,859	18,274
Non-current liabilities	1,407	217	89	43	47
Current liabilities	3,805	5,283	3,709	9,153	3,167
Equity	6,108	7,098	14,424	10,577	18,613
Equity ratio (in %)	54.0	56.3	79.2	53.5	85.3
Total assets	11,320	12,598	18,222	19,773	21,827
Statement of Cash Flows					
Cash flow from operating activities	-7,242	-8,127	-13,283	-9,576	-10,351
Cash flow from investing activities	-853	159	-379	-548	724
Cash flow from financing activities	7,603	9,032	17,422	11,499	13,274
Net cash flow	-492	1,064	3,760	1,375	3,647
Cash consumption	-8,095	-7,968	-13,662	-10,124	-9,627
Cash and cash equivalents at the end of the year	6,715	7,779	11,531	12,826	16,487
Stock					
Weighted average number of shares issued	13,631,263	17,117,101	20,271,817	23,161,627	27,016,155
Earnings per share (basic and diluted, in EUR)	-0.65	-0.52	-0.55	-0.44	-0.47
Share price as of the balance sheet date (in EUR)	5.10	2.22	4.55	4.25	1.77
Number of employees as of the reporting date	37	38	45	46	44

CONSOLIDATED FINANCIAL STATEMENTS FOR FISCAL 2018

– in accordance with International Financial Reporting Standards (IFRSs) –

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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 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, 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 **A**mendments 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 effective 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 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 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 capitalization 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 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 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 1.1403. 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 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) to members of the Executive Board	*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

NOTES TO THE CONSOLIDATED BALANCE SHEET

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 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.

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**

EQUITY

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 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, 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 resolution 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 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.

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 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.

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 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.

29 FINANCIAL INSTRUMENTS AND FINANCIAL LIABILITIES FROM FINANCING ACTIVITIES

Primary financial instruments			as of Dec 31, 2017		as of Dec 12, 2018	
EUR thousand	Measure-ment 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 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 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 impeccable 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 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

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 out-standing	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 out-standing	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 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)

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 expired	Rights exercised	Rights reclassified	Rights held as of Dec 31
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 expired	Rights exercised	Rights reclassified	Rights held as of Dec 31
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 expired	Rights exercised	Rights reclassified	Rights held as of Dec 31
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 expired	Rights exercised	Rights reclassified	Rights held as of Dec 31
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 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 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.

OTHER INFORMATION

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. 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 Genest-strasse 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).

The U.S. subsidiary has rented office space at its Germantown, MD, location. This lease may be terminated 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. Additionally, 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.

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 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/*).

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 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

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 Stock" 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 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 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
German CPA

Andreas Weissinger
German CPA

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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)

IMPRINT

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CONCEPT & DESIGN

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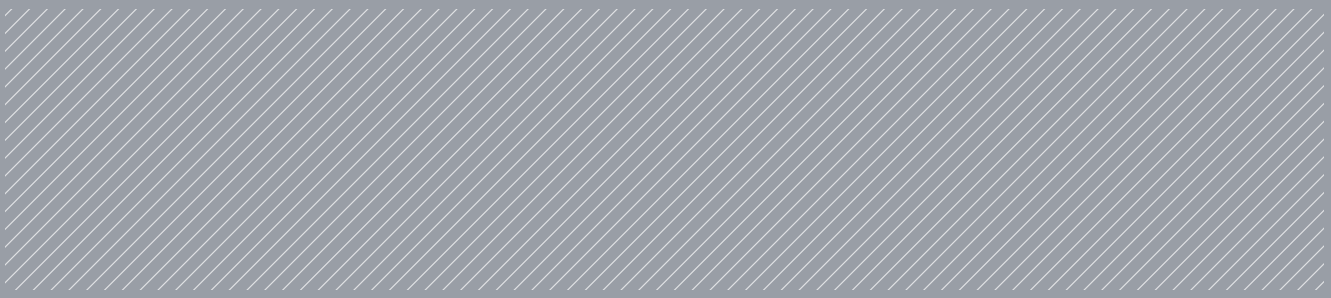
This annual report is also available in German.

CORPORATE CALENDAR

Interim Statement 2019 – January 1–March 31, 2019	Wednesday, May 08, 2019
Annual General Shareholders' Meeting 2019 in Berlin	Wednesday, May 15, 2019
Half-yearly Report 2019 – January 1–June 30, 2019	Wednesday, August 07, 2019
Interim Statement 2019 – January 1–September 30, 2019	Wednesday, November 06, 2019



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