

# 2016

QIAGEN N.V. (IFRS Annual Report)  
Venlo, The Netherlands



# QIAGEN N.V.

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## **Report of the Supervisory Board**

The members of the Supervisory Board wish to thank all QIAGEN employees and members of the Executive Committee for the progress made during 2016 toward achieving QIAGEN's vision of making improvements in life possible. We would also like to thank our shareholders, customers, business partners and other stakeholders for honoring QIAGEN with their continued collaboration and trust.

### **Review of 2016 performance**

A key role of the Supervisory Board is to monitor the conduct and progress of QIAGEN's business on a regular basis, and this was done during 2016 with detailed written and oral reports from the Managing Directors, members of the Executive Committee and other senior leaders. QIAGEN's performance during the year showed the transformation undertaken in the last few years is building momentum thanks to the power of our Sample to Insight portfolio and are moving ahead on a new growth trajectory, and this has strengthened QIAGEN's position as a global leader in molecular testing. All customer classes and regions grew in 2016, led by expansion in Molecular Diagnostics, apart from the expected headwinds from lower U.S. HPV test sales. The Academia, Pharma and Applied Testing customer classes also produced organic growth that was augmented by the acquisitions of MO BIO and Exiqon, which further differentiate our Sample to Insight portfolio. Among the 2016 highlights, sales of the QuantiFERON-TB test for tuberculosis detection reached a new 25% CER (constant exchange rates) growth pace, and the fourth-generation QuantiFERON-TB Gold Plus was submitted for U.S. approval. The GeneReader NGS System received a positive reception from labs seeking a cost-effective, end-to-end solution for next-generation sequencing, and placements exceeded our target for 10% of the market for new benchtop sequencers in oncology applications. The QIASymphony system also exceeded the 2016 goal of 1,750 cumulative placements, with double-digit sales growth in consumables. In Personalized Healthcare, QIAGEN signed additional co-development agreements for companion diagnostics, surpassing the milestone of 20 master collaboration agreements with pharma companies. QIAGEN's differentiated technologies in cutting-edge areas such as liquid biopsy, digital NGS and the microbiome also generated robust growth in 2016. The Supervisory Board believes QIAGEN is well-positioned to make significant progress in 2017 and deliver on goals for higher sales and adjusted earnings at constant exchange rates, especially as QIAGEN moves beyond the material headwinds that weighed on the overall sales performance in recent years from declining sales of the franchise for cervical cancer screening (HPV test) in the United States.

### **Composition of the Supervisory Board and Managing Board**

During the course of 2016, the composition and leadership of the Supervisory Board changed, with seven members at the end of the year under the leadership of Prof. Dr. Manfred Karobath, who was elected chairman of the Supervisory Board after the Annual General Meeting in June 2016. The composition of the Managing Board remained unchanged with two members (Chief Executive Officer Peer M. Schatz and Chief Financial Officer Roland Sackers).

As announced during 2015, Dr. Werner Brandt stepped down from the Supervisory Board after the Annual General Meeting in June 2016, and also relinquished his role as Chairman. Dr. Brandt, who has been a member of the Supervisory Board since 2007, cited business and personal commitments for this decision. The members of the Supervisory Board and Managing Board would like to thank Dr. Brandt for his many contributions to QIAGEN during his tenure that were based on his business acumen, professionalism, leadership and collaborative spirit, and wish him all the best in his future endeavors.

Prof. Dr. Ross Levine was elected by shareholders to the Supervisory Board at the Annual General Meeting of last year. Prof. Levine brings extensive scientific, medical and commercial expertise to our Supervisory Board. His professional roles include serving as the Director for the Center for Hematologic Malignancies and as the Laurence Joseph Dineen Chair in Leukemia Research, Human Oncology and Pathogenesis Program for the Leukemia Service at Memorial Sloan-Kettering Cancer Center and as Professor of Medicine at Weill Cornell Medical College.

Furthermore, the Joint Meeting of the Managing Board and the Supervisory Board resolved to increase the number of Supervisory Board Members and therefore Dr. Håkan Björklund was appointed as a new Supervisory Board member in March 2017. Dr. Björklund brings an extensive international background in the life science industry to QIAGEN, in particular through his current role as Operating Executive at Avista Capital Partners, as well as through previous roles as CEO of the global pharmaceutical company Nycomed, Regional Director at Astra (now AstraZeneca) and President of Astra Draco. In addition to QIAGEN, he currently serves as Chairman of the Board of Directors of Swedish Orpham Biovitrum AB. Dr. Björklund earlier served as Chairman of the Board of Directors of Lundbeck A/S, and was also a Member of the Board of Directors of several international life science companies, including Alere, Coloplast and Danisco. Dr. Björklund has a Ph.D. in Neuroscience from Karolinska Institutet in Sweden.

All current members of the Supervisory Board are expected to stand for election at the Annual General Meeting scheduled for June 21, 2017.

The target profile of the Supervisory Board can be found on QIAGEN's website, and the current composition fully complies with this profile. Further information on the individual members of the Supervisory Board is set forth in the Corporate Governance Report.

QIAGEN has a long-standing commitment to developing a diverse leadership team, including the Managing Board and the Supervisory Board, with a broad range of experience, skills and capabilities. In nominating candidates for these boards, QIAGEN supports the trend toward higher participation of women. QIAGEN is committed to expanding diversity while pursuing individuals for these boards with a unique blend of scientific and commercial expertise and experience that will contribute to the future success of its business. Management development programs support the career advancement of leaders regardless of gender and other factors. As a result, a number of women are in key leadership roles, particularly in leading commercial and operational positions around the world. In line with this long-standing commitment, the Supervisory Board will take the aim for a diverse leadership team into account in the future when proposing members for election or re-election to its Board without compromising QIAGEN's commitment to hiring the best individuals for positions without any discrimination. The current governance structure has led to the size of the Managing Board of two members, so achieving a diversity goal as measured solely by a percentage of overall membership is difficult to achieve. At the same time, QIAGEN has significantly increased the diversity of its senior leadership team and will continue to do so in the future.

### **Principal topics discussed by the Supervisory Board**

As empowered by the Dutch Corporate Governance Code, the Supervisory Board devoted considerable time during 2016 to discussing and assessing QIAGEN's corporate strategy, main risks and opportunities, and an annual assessment by the Managing Board of the design and effectiveness of internal risk management and control systems as well as any significant changes in them. In addition, the Supervisory Board discussed and reviewed the functioning of its committees and individual members, its current composition, competence, succession schedule and desired profile in various meetings and through written surveys.

The Supervisory Board met five times during the course of 2016 with regular attendance of the members of the Managing Board for certain agenda items. The Supervisory Board also met to review and discuss agenda items in the absence of the Managing Board members, such as performance and strategy as well as to discuss compensation matters. Information about the Supervisory Board members, including positions held on other boards, is included in the Corporate Governance Report. All members of the Supervisory Board had adequate time available to give sufficient attention to the concerns of the company. The Supervisory Board came to the conclusion that it and the Managing Board were functioning properly.

### **Committees of the Supervisory Board**

The Supervisory Board has established an Audit Committee (Chair Mr. Lawrence Rosen), a Compensation Committee (Chair Ms. Elizabeth Tallett), a Selection and Appointment Committee (Chair Prof. Dr. Karobath), and a

Science and Technology Committee (Chair Dr. Metin Colpan) from among its members. The Supervisory Board reserves the right to establish other committees as deemed beneficial, and has approved charters under which each of these committees operates (charters are available on our website at [www.qiagen.com](http://www.qiagen.com)).

Further detailed information on the composition of the Supervisory Board and its committees, the number of committee meetings held in 2016 and the main topics of discussion, the independence of its members and their remuneration, as well as other information on the Supervisory Board, can be found in the Corporate Governance Report, which is an integral part of this Annual Report.

Through its Compensation Committee, the Supervisory Board executed and monitored compliance with the Remuneration Policy approved at the Annual General Meeting held on June 25, 2014. Compensation of Managing Board members consists of a fixed salary and variable components. Variable compensation includes one-time and annual payments linked to business performance (bonuses) as well as long-term incentives, such as share-based compensation, and pension plans. The Remuneration Policy and the various aspects of compensation, including the detailed remuneration of individual Managing Board members, are described in the Remuneration Report, which is part of this Annual Report and is also available on QIAGEN's website. Information on QIAGEN's activities was communicated by the Managing Board to the Supervisory Board through regular meetings and business reports.

## **Corporate Governance**

All members of the Supervisory Board fulfill the independence criteria as defined by the Dutch Corporate Governance Code. The Supervisory Board follows the principle of increasing shareholder value as the members represent the interests of all stakeholders, including shareholders, and has always pursued the highest standards in Corporate Governance.

QIAGEN is committed to a corporate governance structure that best suits its business and stakeholders, and that complies with relevant rules and regulations. Since 1997, QIAGEN has endorsed the recommendations made in the report of the Netherlands Committee on Corporate Governance, which was replaced by the Dutch Corporate Governance Code effective January 1, 2004, and amended and restated effective January 1, 2009. Our policy is to follow the guidelines of Good Practice of Corporate Governance as described in the Dutch Corporate Governance Code, although some minor deviations may result from the impact of factors such as legal requirements imposed on QIAGEN or industry standards.

QIAGEN is also subject to the rules regarding Corporate Governance set by NASDAQ, where its common shares have been listed since 1996. QIAGEN provides detailed disclosure in the Corporate Governance Report regarding compliance with the Dutch Corporate Governance Code.

QIAGEN believes all of its operations are carried out in accordance with legal frameworks, including Dutch Corporate Law, U.S. laws and regulations, and the laws of the German capital market, in particular the Wertpapierhandelsgesetz.

QIAGEN's common shares are registered and traded in the U.S. on the NASDAQ Global Select Market and in Germany on the Frankfurt Stock Exchange in the Prime Standard segment. Shareholders in the U.S. and Europe hold the majority of common shares.

## **Financial statements and audits**

In this Annual Report, the financial statements for 2016 are presented as prepared by the Managing Board, audited by KPMG (Independent Public Accounting Firm). We examined the financial statements, the proposal for the use of the distributable profit, the consolidated financial statements and the management report. We have no objections, thus we concur with the results of the audit, and it has been approved by the Supervisory Board. In closing, the Supervisory Board would like to again thank all QIAGEN employees for their dedication and hard work during 2016.

Venlo, the Netherlands, April 2017

The Supervisory Board:

Prof. Dr. Manfred Karobath

Chairman

## Management Report

### Operations and Business Environment

#### *Company overview*

QIAGEN is a global leader in Sample to Insight solutions that transform biological samples into valuable molecular insights. Our vision is to make improvements in life possible by enabling our customers in four broad classes - Molecular Diagnostics, Applied Testing, Pharma and Academia - to achieve outstanding success and breakthroughs using reliable and efficient solutions for molecular testing.

QIAGEN's Sample to Insight solutions integrate sample and assay technologies, bioinformatics and automation systems. Our solutions support more than 500,000 customers worldwide in generating insights into the molecular building blocks of life. Our proven solutions are providing answers in hospitals and laboratories worldwide, helping make sense of the increasing volumes and complexity of biological information.

Since the first sequencing of the human genome was completed in 2003, knowledge of the molecular basis of life, its mechanisms and diseases has been growing exponentially. In what observers call “the Century of Biology,” dramatic acceleration in the speed of sequencing - and reduction in cost - is generating new discoveries and vast quantities of genomic data. This revolution in the life sciences is transforming healthcare and influencing many other areas of everyday life. QIAGEN's mission is to drive this ongoing wave of discoveries and the wide-ranging applications they are spawning.

QIAGEN began operations in 1986 as a pioneer in the emerging biotechnology sector, introducing a novel method that standardized and accelerated extraction and purification of nucleic acids from biological samples. As molecular biology has grown to influence many areas of life, QIAGEN has expanded to serve the full spectrum of market needs. Our sample technologies are unmatched in quality for isolating and preparing DNA (deoxyribonucleic acid), RNA (ribonucleic acid) and proteins from blood or other liquids, tissue, plants or other materials. Our assay technologies amplify, enrich and make these biomolecules accessible for analysis, such as identifying the genetic information of a pathogen or a gene mutation in a tumor. QIAGEN's industry-leading bioinformatics solutions allows users to analyze and interpret data to provide relevant, actionable insights. Our automation platforms based on polymerase chain reaction (PCR), next-generation sequencing (NGS) and other technologies tie these together in seamless and cost-effective molecular testing workflows - from Sample to Insight.

Net sales of \$1.34 billion in 2016 were comprised of consumable kits and other revenues (87% of sales) and automated systems and instruments (13% of sales). Approximately 50% of net sales in 2016 were in Molecular Diagnostics, and 50% went to Life Sciences customer classes in the Academia, Pharma and Applied Testing markets.

QIAGEN has grown by introducing innovative products and making strategic acquisitions that address the rapidly evolving needs of customers to transform biological samples into valuable molecular insights. We have funded our growth through internally generated funds, debt offerings and private and public sales of equity securities. QIAGEN has global shares that are listed on the NASDAQ exchange under the ticker symbol “QGEN” and on the Frankfurt Prime Standard as “QIA.”

The company is registered under its commercial and legal name QIAGEN N.V. with the trade register (*kamer van koophandel*) of the Dutch region Limburg Noord under file number 12036979. QIAGEN N.V. is a public limited liability company (*naamloze vennootschap*) under Dutch law as a holding company. Our principal executive office is located at Hulsterweg 82, 5912 PL Venlo, The Netherlands, and our telephone number is +31-77-355-6600.

As a holding company, QIAGEN conducts business through subsidiaries located throughout the world. Further information about QIAGEN can be found at [www.qiagen.com](http://www.qiagen.com). By referring to our website, we do not incorporate the website or any portion of the website by reference into this Annual Report.

#### *Recent Developments*

QIAGEN has recently achieved a number of strategic milestones in serving customers and growing our business.

#### **Leadership in differentiated core technologies continuing to drive growth:**

Building on our long-standing core strength in sample technologies, which laboratories around the world rely on to obtain highest-quality DNA and RNA for molecular testing, QIAGEN continued to expand our offerings in 2016 with differentiated solutions for the front-end challenges of customers. QIAGEN technologies process an estimated 50,000 biological samples a day. Our strategic focus is on rapidly growing areas of research and clinical application.

- QIAGEN expanded our leadership in “liquid biopsies,” solutions that unlock molecular insights from blood or other fluids as non-invasive alternatives to surgical biopsies. Our technologies for isolation and stabilization of nucleic acids are used in an estimated 80% of liquid biopsy testing. In 2016, we continued to introduce cutting-edge technologies to handle the sample and library preparation challenges.

- QIAGEN also launched the first Sample to Insight NGS solution for analyzing either liquid biopsies or formalin-fixed, paraffin-embedded (FFPE) tissue samples in clinical cancer research, a complete workflow using the GeneReader NGS System and our Actionable Insights Tumor Panel and our unique and new QIAGEN Clinical Insights bioinformatics solution.
- QIAGEN delivered brisk growth from the industry's broadest Sample to Insight portfolio for research on the microbiome and metagenomics, the study of microbial interactions with the environment and humans. Following the 2015 acquisition of MO BIO Laboratories, QIAGEN sample technologies are the starting point for the majority of these studies. In 2016 we integrated front-end kits with specialized assays and bioinformatics to provide complete Sample to Insight solutions.
- Acquisition of the Danish company Exiqon A/S in 2016 added to QIAGEN's portfolio of solutions to unlock insights from RNA in the fight against cancer and other diseases. Integrating the Exiqon solutions gives QIAGEN a leading position in the market for non-coding RNA (ncRNA) analysis in epigenetic research, with future potential to expand into clinical diagnostics.
- QIAGEN further expanded our leadership in solutions for single-cell analysis, which looks at individual cells and their heterogeneity to research the pathways of disease or to monitor patient progress, in fields such as oncology, immunology, neurobiology and stem-cell biology. In 2016, we launched QIAcscout, a compact instrument enabling researchers to efficiently select and isolate viable single cells for analysis with NGS, PCR or other methods, as well as adding novel single-cell sample kits.

#### **QuantiFERON-TB Gold growing rapidly as world focuses on tuberculosis control:**

- QIAGEN is aiding the global fight against tuberculosis (TB), an infectious disease that kills about 1.8 million people annually, with our QuantiFERON-TB Gold and QuantiFERON-TB Gold Plus tests, the most accurate assays for detecting infection. Screening for latent TB in high-risk patient populations, an asymptomatic phase of the infection that can lie dormant for years and then "reactivate" as active, contagious TB, is increasingly recognized as a key component in controlling the disease.
- Our novel technology, delivering reliable results with the third-generation QuantiFERON-TB Gold (QFT) and fourth-generation QuantiFERON-TB Gold Plus (QFT-Plus), has become the latent TB screening technique of choice around the world. The efficient, laboratory-based tests are displacing the less accurate, century-old tuberculin skin test, and sales surpassed \$140 million in 2016.
- QuantiFERON-TB Gold gained momentum in 2016 from key clinical guidelines for TB control. The U.S. Preventive Services Task Force recommended that primary care clinicians screen adult patients at high risk for latent TB – and cited QFT as a test proven to be reliable. A separate task force, backed by the U.S. Centers for Disease Control and Prevention (CDC) and two professional societies, updated evidence-based guidelines to broaden the preference for modern blood-based TB tests such as QFT over the century-year-old tuberculin skin test. It also broadened the groups to be screened for TB infection. These guidelines were endorsed by the European Respiratory Society.
- QuantiFERON-TB Gold-Plus was submitted to the U.S. Food and Drug Administration in late 2016 for pre-market approval. QFT-Plus has been launched in more than 60 countries following European CE-IVD clearance in late 2014. The new test, which adds proprietary CD8 T-cell technology and other enhancements to our market-leading test, also gained important support in the global TB control community. The World Health Organization (WHO) 2016 annual report on TB cited early clinical results on QFT-Plus indicating its ability to measure CD8 T-cell response may be able to identify patients at greater risk of progression to active TB.

#### **Next-generation sequencing solutions extending QIAGEN's reach:**

- Our GeneReader NGS System, the first complete Sample to Insight next-generation sequencing solution designed for any laboratory to deliver actionable results, has been well received in early commercialization since its late-2015 launch. GeneReader NGS adoption is accelerating, achieving our goal of 55-60 placements by year-end 2016, more than a 10% share of the estimated global annual market for new placements of benchtop sequencers in oncology applications. The system is the world's first truly end-to-end NGS workflow from primary sample to a final report - providing a simpler, more cost-effective way for laboratories to take advantage of NGS technology and improve outcomes.
- QIAGEN has initiated the roll out of a deep pipeline of enhancements to the GeneReader NGS System, adding value for basic and translational research labs. In 2016 these included adaptation of our Actionable Insights Tumor Panel for use with liquid biopsies, adding to FFPE tissue samples; an extensive package of quality control and verification data for setup and validation; a partnership to integrate the GeneReader NGS System with users' laboratory information management systems (LIMS); and the option of QIASymphony SP for higher-throughput front-end automation.

- In November 2016, two months after a U.S. court issued a preliminary injunction restricting U.S. customers' access to the GeneReader NGS System while considering a competitor's lawsuit, QIAGEN announced relaunch of the workflow with new sequencing chemistry that avoids the patent at issue in the United States. The new chemistry was made available to select U.S. customers in an early-access phase starting December 1, 2016, and full commercialization is set for early 2017. In the rest of the world, GeneReader NGS System marketing has continued without interruption, and the new chemistry with enhanced performance will be rolled out in 2017.
- In 2017, QIAGEN expects to launch additional enhancements and new content to improve the utility, efficiency and cost effectiveness of the GeneReader NGS System. We plan to launch at least five new GeneRead QIAact panels, including in-depth breast and lung cancer panels as well as customized panels for specific customer needs. Enhancements to the Actionable Insights Tumor Panel (ATP), the first GeneRead QIAact panel, reduce turnaround time and increase the number of tissue or liquid biopsy samples analyzed. Proprietary Digital NGS technology in the new panels will detect additional mutation types such as large rearrangements, gene fusions, copy number variations (CNVs) and genomic insertions or deletions (InDels), in addition to current detection of single nucleotide polymorphisms (SNPs).
- As the leader in "universal" technologies for use with any sequencing system, QIAGEN continues to expand our portfolio. In 2016, we added to our line-up of liquid biopsy solutions with the launch of the QIAseq cfDNA All-in-One Kit, the first dedicated solution for use on any NGS platform that combines cell-free DNA extraction and library preparation for liquid biopsy analysis. QIAGEN pre-analytical solutions are used in an estimated 80% of all NGS reactions.
- Also in 2016, we launched a comprehensive portfolio of QIAseq NGS panels with our Digital NGS technology, enabling more accurate quantification and detection of DNA, RNA and miRNA across all next-generation sequencing platforms.

#### **Leadership in Personalized Healthcare continuing its momentum:**

- QIAGEN continues to roll out novel companion diagnostics that deliver actionable insights enabling treatment decisions based on patients' individual genomic information. In 2016, QIAGEN launched the new *ipsogen* CALR RGQ PCR Kit in Europe, a unique CE-IVD marked assay for use in blood cancers known as myeloproliferative neoplasms (MPN). As the latest addition to the *ipsogen* portfolio of assays for common and rare leukemia types, the test runs on QIAGEN's QIASymphony RGQ platforms.
- Our Personalized Healthcare pipeline continues to expand through collaborations with pharmaceutical and biotech companies to develop and commercialize companion diagnostics paired with targeted drugs. In 2016, we reached a milestone of 20 master collaboration agreements with Pharma companies, each providing for multiple projects. We added partnerships in 2016 with Mirati Therapeutics, Inc., to commercialize a companion diagnostic for a targeted therapy in non-small cell lung cancer; with Daiichi Sankyo for multiple projects; and with an undisclosed partner in immuno-oncology. Most of the specific projects are unannounced at the request of the Pharma partners. As the world's leading independent developer of molecular technologies, QIAGEN is the industry's preferred partner for developing companion diagnostics.
- QIAGEN offers our collaborators in Personalized Healthcare access to multiple platforms, including QIASymphony and the GeneReader NGS System and the multi-modal Modaplex system. These projects include development of single-target assays or multiplex panels, depending on specific needs and biomarkers involved for particular diseases and targeted therapies. In addition, some Personalized Healthcare tests provide predictive value for therapy or enable monitoring of individual patients' progress.
- In 2016, we entered a collaboration with Therawis Diagnostics GmbH to develop and commercialize predictive assays in oncology. An initial project is to commercialize an assay for PITX2 as a biomarker to predict effectiveness of anthracycline treatment in triple negative and other high-risk breast cancer patients, an area of high unmet need.
- QIAGEN also began a collaboration with HTG Molecular Diagnostics, Inc. (HTG), to create a complete NGS-based solution for developing of companion diagnostics with Pharma companies, with a focus on oncology. The agreement includes assay development, commercialization and manufacturing. QIAGEN also made a minority investment in HTG.

#### **QIASymphony delivering platform growth as content menu expands:**

- QIAGEN achieved our 2016 goal of surpassing 1,750 cumulative placements of the flexible modular QIASymphony platform, up from 1,500 at the end of 2015. The QIASymphony platform offers customers Sample to Insight automation for medium-throughput molecular testing workflows. The larger installed base and expanding content menus drove our 2016 growth in consumables.
- In 2016, QIAGEN made the QIASymphony SP instrument available as a front-end option for sample processing for the GeneReader NGS System, adding highly automated, higher throughput sample volumes and high flexibility to the world's first complete Sample to Insight solution for NGS. The NGS workflow now integrates seamlessly with QIASymphony SP,

enabling laboratories outside the United States to perform sample processing of different sample types simultaneously with continuous loading, random access and greater speed for demanding environments.

- To enhance the QIASymphony platform's value to customers worldwide, QIAGEN continues to advance a pipeline of development projects for regulator-approved molecular diagnostics to run on the platform, as well as expanding our Applied Testing content.
- The QIASymphony platform serves all of our customer classes: Approximately 60% of current placements are in Molecular Diagnostics, and 40% are in the Life Sciences with Applied Testing, Pharma and Academia customers.

#### **Industry-leading bioinformatics turning raw genomic data into valuable insights:**

- QIAGEN's broad offering of content-enabled software, the leading portfolio of bioinformatics enabling users to gain valuable insights from sequencing data, continues to grow as a standalone franchise. In addition, it increasingly serves as a driver for Sample to Insight workflows across all platforms and applications. Our bioinformatics turn vast amounts of genomic data into actionable insights for customers, addressing a critical bottleneck in next-generation sequencing, especially for clinical research and diagnostics. We continue to roll out new solutions to meet specialized needs in research and healthcare and to integrate rich bioinformatics with QIAGEN's molecular testing workflows.
- In January 2017, QIAGEN acquired OmicSoft Corporation to expand our offering with solutions enabling scientists to visualize and mine large institutional and publicly available "omics" datasets, in addition to the expertly curated, literature-based datasets marketed by QIAGEN. The OmicSoft solutions meet a growing need in discovery and translational research to access and manage huge amounts of data on DNA, RNA and other variables generated by next-generation sequencing.
- The unique RNA-seq Explorer Solution, a bioinformatics-driven approach to analysis and interpretation of RNA sequencing data from liquid biopsies, was introduced in 2016. RNA-seq Explorer integrates QIAGEN genomic knowledge bases with software solutions to generate clear insights for research into the detection, diagnosis and treatment of cancer.
- QIAGEN also enhanced our research workflow for hereditary and rare diseases, targeting difficult "diagnostic odyssey" cases with capabilities using liquid biopsies for non-invasive prenatal testing (NIPT) and cancer biomarker discovery.
- In 2016, we partnered with lab informatics company Genohm to empower GeneReader NGS System users with seamless data management by integrating our genomic workflow with their laboratory information management systems (LIMS). GeneRead Link, a middleware co-developed by the two companies, provides full connectivity for GeneReader NGS workflows with the leading LIMS systems.
- QIAGEN pursues collaborations and linkages across the genomics and bioinformatics industry to offer users the richest access possible to insights for research and diagnostics. In 2016, we offered our Hereditary Disease Solution customers a plugin to implement the Broad Institute's GATK best practices, the gold standard for variant calling, as part of the QIAGEN Biomedical Genomics Workbench software. For microbiome researchers, we partnered with CosmosID, a leading genomic big data company, in the launch of a metagenomics analysis plug-in for the QIAGEN Microbial Genomics Pro Suite and CLC Genomics Workbench.
- In 2016, we announced collaborations to combine our industry-leading genome analysis applications with hardware solutions from tech leaders Intel and BioTeam, aiming to create infrastructure solutions making population-scale genomic analysis feasible for more researchers. Both projects are in development for use in managing and interpreting the massive data from NGS research.

#### **Targeted actions improving efficiency and increasing returns to shareholders**

- In 2016, QIAGEN announced initiatives to return \$300 million in capital to shareholders by the end of 2017. In addition, we announced a series of targeted restructuring actions to improve efficiency and profitability, while supporting sales momentum, after a period of investment to support QIAGEN's transformation as a molecular testing leader.
- The commitment to return \$300 million in cash to QIAGEN shareholders included a synthetic share repurchase, which was completed in January 2017. This transaction returned about \$244 million to shareholders through a combination of a direct capital repayment with a reverse stock split. QIAGEN intends to return the balance of the \$300 million commitment through open-market share repurchases during 2017.
- Restructuring actions initiated in the fourth quarter of 2016 include closing the site in Valencia, California, and spinning off certain activities in Hombrechtikon, Switzerland; expanding the use of shared service centers and global centers of excellence to consolidate activities; streamlining selected organizational structures to reduce complexity; realigning roles of global and regional marketing teams; and optimizing sales channels to better engage with customers, including greater use of digital technologies. A pre-tax restructuring charge of \$79.1 million (\$0.24 per share after taxes), including

approximately \$42.4 million of non-cash items, was recorded in the fourth quarter of 2016. Further pre-tax charges of approximately \$10 million (or about \$0.03 per share after taxes) are expected during 2017.

## ***Our Products***

QIAGEN leverages our leadership in Sample to Insight solutions for molecular testing across a wide range of applications and customer classes. We provide more than 500 core consumable products (sample and assay “kits”), as well as instruments that automate the use of these products. Our bioinformatics solutions connect laboratory workflows and process extensive amounts of genomic data, reporting relevant insights to enable scientists or clinicians to decide on further action.

QIAGEN’s diverse revenue streams can be seen in two main categories: consumables and related revenue, and automation platforms and instruments.

### **Consumables and related revenues**

Consumable products, accounting for approximately 79%-80% of net sales, typically include sample technologies to extract and purify molecules of interest from biological samples and assay technologies that make the information in these genomic molecules available for analysis and interpretation. To maximize customer convenience and reduce user error, these kits contain all necessary reagents and a manual of protocols and background information. Reliability, standardization, ease of use and cost-effectiveness are keys to the success of molecular testing products.

QIAGEN’s **differentiated sample technologies** ensure that each biological sample is processed in a highly reproducible, standardized method with the highest quality. A broad range of kits support applications such as plasmid DNA purification, RNA purification and stabilization, genomic and viral nucleic acid purification, DNA cleanup after PCR and sequencing, target enrichment, and library preparation for sequencing. For example, in 2016 we introduced several innovative sample and library preparation kits adding to our global leadership in solutions for minimally-invasive liquid biopsies, and we expanded our portfolio of solutions for processing difficult samples in research into the microbiome and metagenomics.

Our **assay technology solutions** contain all the needed reagents to enable customers to target molecules of interest for detection on platforms supporting PCR, NGS or multimodal analysis. Each assay kit is sufficient to support a number of applications, varying from a single application to kits containing more than 1,000 applications each. Applications include open, general-purpose PCR reagents, as well as kits for the detection of specific viral or bacterial pathogens and parasites in humans and animals, pharmacogenomic testing and genotyping. In PCR, examples are our *therascreen* family of companion diagnostics, *artus* line for profiling infectious diseases, and *investigator* assays for forensics and human identification and our GeneGlobe portal gives customers access to a vast portfolio of predesigned assays. A growing portfolio of NGS gene panels enable sequencing to identify DNA or RNA variants relevant to clinical or research targets in cancer or other diseases. In 2016 we launched a comprehensive portfolio of universal QIAseq kits with proprietary Digital NGS technology to run on any NGS platform, and in early 2017 we added GeneRead QIAact lung cancer and breast cancer panels to our growing menu of molecular content designed for the GeneReader NGS System.

Related revenues, accounting for approximately 7%-8% of our net sales, include **bioinformatics solutions**, sold as freestanding software or cloud-based solutions and also integrated into QIAGEN consumables and instruments for seamless Sample to Insight workflows. Examples of our bioinformatics solutions:

**Ingenuity Variant Analysis**, a powerful cloud-based platform tapping into the QIAGEN Knowledge Base, interprets data from NGS analysis to efficiently filter genetic variants and interpret links to diseases.

**QIAGEN Clinical Insight**, a unique evidence-based decision support solution, draws on the QIAGEN Knowledge Base to deliver clinically relevant insights from complex genomic variants identified in NGS.

**CLC Genomics Workbench** incorporates cutting-edge technology and algorithms to overcome challenges face by scientists in analyzing and visualizing data from all major NGS platforms.

**GeneGlobe**, a web-based portal, enables researchers to search and select gene- and pathway-specific solutions from approximately 25 million pre-designed and custom PCR assay kits, NGS assay panels and other products.

Related revenues also include royalties, milestone payments from co-development agreements with pharmaceutical companies, payments from technology licenses and patent sales, and custom services, such as whole genome amplification services, DNA sequencing, and non-cGMP DNA production on a contract basis.

### **Automation platforms and instruments**

Our instrumentation systems, contributing approximately 12%-13% of net sales together with related services and contracts, automate the use of consumables into efficient workflows for a broad range of laboratory needs. QIAGEN platforms are designed to carry our customers from Sample to Insight - handling and preparation of biological samples, analysis using sequencing technologies, and interpretation that delivers valuable insights. These instruments enable laboratories to perform

reliable and reproducible processes, including nucleic acid sample preparation, assay setup, target detection, and interpretation of genomic information. Often several of these instruments are integrated into end-to-end workflows.

Among the automation platforms that contribute to QIAGEN's business:

**QIASymphony** is an easy-to-use modular system that has launched a new era of integrated workflow and laboratory automation, making molecular testing more efficient and helping to disseminate standardized, clinically proven molecular diagnostics. Our fully integrated **QIASymphony RGQ**, launched in 2010, includes three modules - **QIASymphony SP** for sample preparation, **QIASymphony AS** for assay setup, and our real-time PCR platform **Rotor-Gene Q**. The Rotor-Gene Q module, the world's first rotary real-time PCR cyclers system, makes sequences of DNA and RNA visible through amplification and quantifiable. In 2016, our installed base increased to more than 1,750 QIASymphony systems worldwide, more than triple the number at the end of 2011. The platform offers many features to enhance workflows, such as continuous loading, random access and the ability to process an almost unlimited range of sample types. QIASymphony has the broadest content menu in its category in Europe and other markets, and QIAGEN is developing more regulator-approved assays to add value for customers.

**GeneReader NGS System**, introduced in late 2015, is the first complete Sample to Insight next-generation sequencing (NGS) solution designed for any laboratory to deliver actionable results. This end-to-end platform provides a simpler, more cost-effective way for basic and translational research to take advantage of NGS technology and improve outcomes. The GeneReader workflow offers the flexibility of scalable batch sizes and continuous loading of multiple flow cells, and customers can create relevant reports using QIAGEN's proven gene panels and bioinformatics solutions. In 2016 we rolled out several expansions in the GeneReader system's capabilities, including use with non-invasive liquid biopsies in addition to tissue samples; sample and library preparation with either QIAcube or QIASymphony SP as a front-end; Digital NGS technology for control of the analysis and reliable detection of extremely rare mutations; and integration with laboratory information management systems (LIMS).

**Modaplex** is a multimodal automation system integrating amplification, capillary electrophoresis and real-time qPCR quantification of multiple targets in a single reaction. This innovative platform allows up to 48 samples, including multiple targets and different types of assays, to run simultaneously in a single well.

**QIAcube** robotic workstations provide highly versatile solutions for automated sample processing, with novel technologies for purification of DNA, RNA and proteins. Seamless integration of sample prep frees up the time of laboratory staff, enabling laboratories to increase productivity and achieve standardized results in analysis using PCR or NGS. The QIAcube is available in a standard and high-throughput version.

**EZ1 Advanced XL** performs automated nucleic acid purification for many sample types in molecular diagnostics, human identity testing, forensics, biomedical research, and gene expression analysis.

**QIAxcel** replaces traditional slab-gel analysis, eliminating time-consuming nucleic acid separation methods in low- to high-throughput labs and offering unprecedented sensitivity and time-to-results for analysis of DNA fragments and RNA.

**QIAscout**, a small benchtop instrument that enables researchers to efficiently select and isolate viable single cells for analysis with NGS, PCR or other methods. QIAscout was launched in 2016.

**PyroMark**, a high-resolution detection platform with Pyrosequencing technology, enables real-time analysis and quantification of genetic mutations and DNA methylation patterns to identify variations, run multiplex analysis for genetic and pathogen detection, or conduct epigenetic research.

**QIAgility** is a compact benchtop instrument that enables rapid, high-precision PCR setup supporting almost all tube and plate formats, as well as Rotor-Discs for the Rotor-Gene Q.

**ESEQuant** portable, battery-operated instruments enable optical measurement for Point of Need molecular testing in healthcare and other applications, particularly in physician practices, emergency rooms, remote areas, and other settings with limited or delayed access to laboratories.

## **Customers**

From the early days of the biotechnology revolution, QIAGEN believed that innovative technologies for the preparation of samples and the analysis of nucleic acids would play an increasingly important role in cutting-edge biology - and that insights extracted from DNA and RNA would be increasingly valuable in research, industry and healthcare.

With a growing portfolio of innovative products for molecular testing, we have built deep customer relationships across the life science value chain. Discoveries often surface in universities and research institutes and are published, then find resources for development by pharmaceutical and biotech companies, and finally move into widespread commercial use in healthcare and other areas of life. We serve the needs of four major customer classes:

- **Molecular Diagnostics** - healthcare providers engaged in patient care including hospitals, public health organizations, reference laboratories and physician practices
- **Applied Testing** - government or industry customers using molecular technologies in fields such as forensics, veterinary diagnostics and food safety testing
- **Pharma** - pharmaceutical and biotechnology companies using molecular testing to support drug discovery, translational medicine and clinical development efforts
- **Academia** - researchers exploring the secrets of life such as disease mechanisms and pathways, in some cases translating findings into drug targets or other products

### *Molecular Diagnostics*

The ability of advanced diagnostic technologies to unlock molecular information for patients is changing the practice of medicine, creating a large and growing market for nucleic acid sample preparation, assay technologies and bioinformatics in clinical care. Dissemination of PCR and other amplification technologies has brought molecular diagnostics into routine use in healthcare around the world, and next-generation sequencing is rapidly disseminating, further transforming healthcare. Technologies for molecular diagnostics enable clinicians and labs to identify and profile microorganisms, cancer cells, bacteria and viruses by detecting their specific nucleic acid sequences or characterizing newly discovered genomic sequences related to diseases. Commercial applications are multiplying as researchers identify new biological markers for disease and develop novel technologies to decipher these diagnostic clues.

The molecular diagnostics market generates total sales estimated by industry experts at more than \$6 billion in 2016, including about \$3-4 billion potentially addressable with QIAGEN's product portfolio. Molecular diagnostics is the most dynamic segment of the global *in vitro* diagnostics market and is growing at a compound annual rate estimated in the high single-digits or low double-digits. Given the advantages of precise genetic information over traditional tests, QIAGEN expects the healthcare market to continue to provide significant growth opportunities.

In QIAGEN's robustly growing Molecular Diagnostics business we focus on three priorities for fighting disease:

**Oncology** - accurately diagnosing cancer, enabling prevention or early detection, and guiding selection of therapies with individualized molecular insights. QIAGEN offers a broad portfolio of companion diagnostic kits and panels to detect mutations of genes such as KRAS, EGFR, BRAF and others that influence the efficacy and safety of medicines. We also provide industry-leading tests used in screening women for human papillomavirus (HPV) to protect from cervical cancer.

**Infectious diseases** - detecting and differentiating a broad range of viral and bacterial infections, including diseases such as HIV, hepatitis and healthcare-associated infections. Use of molecular testing to differentiate among pathogens can be useful in guiding treatment, such as selection of antibiotic or antiviral therapies.

**Immune monitoring** - using advanced technologies that detect immune-system markers as a preventive strategy, such as screening patients for latent TB infection to guard against active TB disease, as well as for monitoring immune function, such as in transplantation patients.

QIAGEN offers one of the broadest portfolios of molecular technologies for healthcare. Success in Molecular Diagnostics depends on the ability to accurately analyze purified nucleic acid samples from sources such as blood, tissue, body fluids and stool, on automated systems that process these samples very reliably and efficiently, often handling hundreds of samples concurrently. Other key factors are the range of assays for diseases and biomarkers, convenience and ease of laboratory workflow, and reliability and standardization of lab procedures.

Our QuantiFERON-TB Gold and QuantiFERON-TB Gold Plus tests lead the industry in screening to support control of tuberculosis (TB), the largest killer of any infectious disease. The World Health Organization (WHO) estimates there were 10.4 million new active TB cases in 2015 and 1.8 million deaths, including 0.4 million deaths from TB in HIV-infected persons. An estimated one-third of the global population is infected with tuberculosis but with no symptoms of active disease, a condition known as latent TB infection (LTBI). Up to 10% of patients with LTBI will eventually develop active, contagious TB disease during their lifetime. Particularly vulnerable groups include immunocompromised patients or those receiving immunosuppressive drugs. The QuantiFERON-TB tests detect latent TB infection more accurately, enabling decisions to initiate preventative therapy in order to avoid progression to active TB. The potential global market for latent TB infection testing is estimated at up to \$1 billion.

QIAGEN also is the global leader in screening technologies for HPV, a viral infection that is the primary cause of cervical cancer, which kills about 270,000 women a year. Our "gold standard" *digene* HC2 HPV Test and our *careHPV* Test for use in low-resource regions lead the market in HPV screening around the world. In the United States, QIAGEN remains a market leader although vigorous price competition has reduced that business to about 3% of our total sales. In Europe and other regions, we are a leader in a growing HPV market based on clinical evidence and policy initiatives for fighting cervical cancer. In 2016, we launched a

follow-up diagnostic test for women at risk of developing cervical cancer. The CE-marked QIAure Methylation Test stratifies cervical cancer risk by detecting and measuring DNA methylation of two genes.

QIAGEN's oncology test portfolio includes a broad range of Personalized Healthcare technologies and biomarkers, including regulator-approved companion diagnostics for oncogenes such as KRAS and EGFR, as well as comprehensive gene panels for research applications in next-generation sequencing. In 2016, we launched the new *ipsogen* CALR RGQ PCR Kit in Europe, a unique CE-IVD marked assay for use in blood cancers known as myeloproliferative neoplasms (MPN). The test is highly synergistic with our European market-leading *ipsogen* JAK2 RGQ PCR Kit for use in blood cancers.

As the world's leading independent developer of molecular technologies, QIAGEN is the preferred partner for pharmaceutical and biotech companies to develop and commercialize companion diagnostics paired with targeted drugs, and the only company offering PCR and NGS technology. In 2016, we initiated additional co-development projects with existing and new partners and surpassed a milestone of 20 master collaboration agreements, each enabling multiple projects. These partnerships add to our pipeline of companion diagnostics to be commercialized in the future, following clinical trials and regulatory approvals along with the drugs.

QIAGEN also offers an extensive range of kits for diagnosing infectious diseases, and we are expanding this portfolio by seeking regulatory approvals of new tests in additional markets.

A key element of our expansion in Molecular Diagnostics is enabling laboratories to efficiently use our assay technologies on QIAGEN automation platforms. Our flagship PCR platform is QIASymphony, based on its flexibility and unique capabilities. We offer broad portfolios of companion diagnostics and infectious disease tests running on the QIASymphony system. We also are developing companion diagnostics for our GeneReader NGS System and Modaplex platform. Nucleic acid samples purified on our instruments are ready for use in the demanding and sensitive downstream assays performed in molecular diagnostic applications. We market assays directly via QIAGEN sales channels, and selected assays through major diagnostic partners or other companies to broaden the distribution of our products.

#### *Applied Testing*

Use of molecular technologies is expanding in more areas of life as industry and government organizations apply standardized Sample to Insight solutions to diverse needs. Applied Testing is our term for applications outside of human healthcare and research - such as human identification and forensics, food and environmental safety, and veterinary testing. The value of genetic "fingerprinting" has been shown for criminal investigations or clarification of paternity or ancestry, public policy compliance for food safety and genetically modified organisms (GMOs), and containment of diseases in commercial livestock. Molecular testing can be performed by well-trained researchers in fully equipped laboratories, and increasingly also by less-trained personnel provided with easy-to-use, reproducible and standardized methods for Point of Need testing.

QIAGEN has developed relationships with molecular testing laboratories and continually innovates across these diverse fields. In 2016, we launched automated high-throughput solutions to serve the growing need for DNA fingerprinting of reference samples for law enforcement databases. QIAGEN also entered a collaboration with the International Commission on Missing Persons to develop and validate a complete NGS solution, including the GeneReader NGS System, to enhance the ability to identify missing persons. Also, manufacturing of our *investigator* kits for forensic and human identity testing met the newly published international standards for forensics. In environmental research, QIAGEN's solutions for metagenomics gained visibility in 2016 and are increasingly used in studies of microbiomes.

#### *Pharma*

QIAGEN has deep relationships with pharmaceutical and biotechnology companies. Drug discovery and translational research efforts increasingly employ genomic information, both to guide research in diseases and to differentiate patient populations most likely to respond to particular therapies. We estimate that about half of QIAGEN sales in this customer class support research, while the other half supports clinical development, including stratification of patient populations based on genetic information. QIAGEN's bioinformatics solutions also are widely used to guide pharmaceutical research.

As new drugs are commercialized, testing technologies developed in parallel with those therapies can move from Pharma R&D into the healthcare market as companion diagnostics, which QIAGEN markets in our Molecular Diagnostics customer class. Healthcare providers use companion diagnostics to test for specific genetic biomarkers that measure the safety and efficacy profiles of drugs in individual patients, achieving the best possible outcomes and avoiding unnecessary treatments. A wave of newly discovered biomarkers and companion diagnostics has begun to transform the treatment of cancer and other diseases.

In addition to the broad portfolio of molecular technologies, QIAGEN brings to the Pharma market a full infrastructure for co-development programs, intellectual property on platforms and content, extensive regulatory experience, global marketing reach, and independence as a company focusing exclusively on these types of technologies.

#### *Academia*

QIAGEN provides Sample to Insight solutions to leading research institutions around the world. While many academic laboratories continue to use manual, labor-intensive methods for nucleic acid separation and purification, QIAGEN has focused on enabling labs to replace time-consuming traditional methods with reliable, fast, highly reproducible, and high-quality nucleic acid extraction and purification technologies. QIAGEN often partners with leading institutions in research projects.

As academic institutions increasingly embrace translational research, bridging from discoveries to practical applications in medicine, our relationships in Academia also support our presence in the Molecular Diagnostics and Pharma customer classes. Research in university settings often helps in the development of specific technologies for targeted biomolecules, and academic research also can result in scientific publications that validate the usefulness of QIAGEN technologies for specific applications.

### ***Global Presence by Category of Activity and Geographic Market***

#### **Product Category Information**

Net sales for the product categories are attributed based on those revenues related to sample and assay products and similarly related revenues including bioinformatics solutions, and revenues derived from instrumentation sales.

| (in thousands)                   | 2016                | 2015                |
|----------------------------------|---------------------|---------------------|
| <b>Net Sales</b>                 |                     |                     |
| Consumables and related revenues | \$ 1,166,131        | \$ 1,114,580        |
| Instrumentation                  | 171,860             | 166,406             |
| Total                            | <u>\$ 1,337,991</u> | <u>\$ 1,280,986</u> |

#### **Geographical Information**

QIAGEN currently markets products in more than 130 countries. The following table shows total revenue by geographic market for the past three years (net sales are attributed to countries based on the location of the customer, as certain subsidiaries have international distribution):

| (in thousands)                 | 2016                | 2015                |
|--------------------------------|---------------------|---------------------|
| <b>Net Sales</b>               |                     |                     |
| Americas:                      |                     |                     |
| United States                  | \$ 555,676          | \$ 525,532          |
| Other Americas                 | 71,797              | 79,578              |
| Total Americas                 | <u>627,473</u>      | <u>605,110</u>      |
| Europe, Middle East and Africa | 428,055             | 409,955             |
| Asia Pacific and Rest of World | 282,463             | 265,921             |
| Total                          | <u>\$ 1,337,991</u> | <u>\$ 1,280,986</u> |

QIAGEN has built an increasing presence in key emerging markets as a growth strategy. In 2016, the top seven emerging markets - Brazil, Russia, India, China, South Korea, Mexico and Turkey - contributed approximately 16% of net sales.

#### ***Growth Drivers and Key Catalysts***

We believe the addressable global market totals approximately \$8 billion for QIAGEN's portfolio of molecular testing products for customers across the continuum of life science research and molecular diagnostics. Driving the industry's long-term growth are ongoing breakthroughs and insights into molecular biology, the emergence of next-generation sequencing, bioinformatics to analyze and interpret molecular information, use of diagnostics to improve healthcare quality and reduce costs, and revenue streams made possible through consumable products.

We have grown substantially with a flexible strategy to accelerate innovation and growth by developing innovative new platforms, consumables and bioinformatics products, partnering with researchers and Pharma companies, and acquiring companies or technologies to complement our portfolio.

We are building momentum by continuing to focus on strategic growth drivers and key catalysts:

1. **Differentiated Core technologies:** Our growing portfolio of Sample to Insight solutions leverages QIAGEN's recognized global leadership in technologies to extract and isolate DNA and RNA from biological samples. In 2016, we expanded our sample technologies with innovative workflows to enable "liquid biopsies" and cutting-edge research, especially with next-generation sequencing.

2. **QuantiFERON-TB:** As the modern standard for detecting latent tuberculosis infection, QuantiFERON-TB Gold aids TB control by screening subpopulations of at-risk patients. In 2016, our fourth-generation QuantiFERON-TB Gold Plus, which provides additional insights for patients at greatest risk, gained momentum in about 60 markets worldwide, and we submitted it for FDA approval.
3. **Next-generation sequencing:** Our strategic initiative to drive NGS adoption in clinical research and diagnostics gained momentum in 2016 with growing adoption of our innovative GeneReader NGS System, providing a simpler, more cost-effective way for laboratories to take advantage of NGS technology and improve outcomes. Our broad portfolio of “universal” solutions for NGS users also is growing rapidly.
4. **Personalized Healthcare:** We continue to develop and introduce companion diagnostics to guide the treatment of cancer and other diseases, as well as innovative sample technologies to support the care of patients. QIAGEN is a leading partner for pharmaceutical companies in co-developing tests paired with drugs for personalized medicine.
5. **QIASymphony:** We are driving global adoption of the QIASymphony automation platform, surpassing our target of 1,750 cumulative placements in 2016, and expanding the content menu of test kits for the platform. Growing QIASymphony placements and the broad menu of innovative consumables, together, drive sales growth.
6. **Bioinformatics:** Our industry-leading bioinformatics portfolio is growing rapidly as users of next-generation sequencing seek solutions for handling huge amounts of genomic data. In 2016, we expanded our content-enabled software solutions for basic and clinical research in oncology and rare inherited diseases, as well as metagenomics and human identification. We continue to integrate bioinformatics with QIAGEN products to create Sample to Insight workflows.

### ***Research and Development***

We are committed to expanding our global leadership in Sample to Insight solutions for molecular testing in healthcare and the life sciences. Our strategy for managing innovation focuses on addressing the most significant unmet medical and scientific needs. We target our resources to develop promising technologies for use by our customers in Molecular Diagnostics, Applied Testing, Pharma and Academia - and to meet the needs of clinicians and scientists in key geographic markets.

Innovation at QIAGEN follows parallel paths:

- Creating new systems for automation of workflows - platforms for laboratories, hospitals and other users of these novel molecular technologies.
- Expanding our broad portfolio of novel “content” - including assays to detect and measure biomarkers for disease or genetic identification.
- Integrating bioinformatics with the testing process - software and cloud-based resources to interpret and transform raw molecular data into useful insights.

As a percentage of sales, our research and development investments are among the highest in our industry. Almost 1,000 employees in research and development work in QIAGEN centers of excellence on three continents. Our comprehensive intellectual property portfolio encompasses approximately 2,200 granted patents and nearly 800 pending applications.

Strengthening our leadership in the automation of laboratories is a key to driving dissemination of molecular testing in healthcare and other fields, as well as generating increased demand for our consumable products. We continue to extend our modular QIASymphony platform, enabling hospitals and other customers to adopt or greatly expand their use of molecular diagnostics. QIAGEN also is rolling out a range of performance enhancements and expansions for our GeneReader NGS System to add value by addressing new applications and improving output and connectivity within labs.

We are commercializing a deep pipeline of assays for preventive screening and diagnostic profiling of diseases, detection of biomarkers to guide personalized medicine in cancer and other diseases, and a broad range of other targets. Our development program generates commercial launches of tests that add value to our QIASymphony RGQ and GeneReader NGS platforms. In 2016, we launched a comprehensive portfolio of QIAseq panels with Digital NGS technology enabling unbiased, accurate quantification of DNA, RNA and miRNA, compatible any next-generation sequencing platform. In Applied Testing, we continue to develop new content for human identification, food safety and veterinary diagnostics. We are also expanding our extensive portfolio of products for disease pathway research by Pharma and Academic customers. In addition, we are developing assays for specific applications in key markets such as China and Japan.

Our bioinformatics teams are developing new software solutions and adding proprietary cloud-based content to support the latest research and clinical trends in molecular testing, especially the interpretation of large volumes of data from next-generation sequencing. In addition, we are integrating these digital technologies with instruments and molecular content to provide our customers seamless Sample to Insight workflows.

### ***Sales and Marketing***

We market our products in more than 130 countries, mainly through subsidiaries in markets that we believe have the greatest sales potential in the Americas, Europe, Australia and Asia. Experienced marketing and sales staff, many of them scientists with academic degrees in molecular biology or related areas, sell our products and provide direct support to customers. Key accounts are overseen by business managers to ensure that we serve customers' commercial needs, such as procurement processes, financing, data on costs and value of our systems, and collaborative relationships. In many markets, we have specialized independent distributors and importers.

Our marketing strategy focuses on providing differentiated, high-quality products across the value chain from Sample to Insight, when possible, integrating components into end-to-end solutions, and enhancing relationships with commitment to technical excellence and customer service. Our "omni-channel" approach seeks to engage customers through their preferred channels - online, by phone, in person, etc. – and to optimize investment in different customer types.

Digital channels - including our website ([www.qiagen.com](http://www.qiagen.com)), product-specific sites and social media. QIAGEN has initiated actions to drive the growth of digital commercialization channels. Our website makes ordering easy with a fully searchable online product catalog and ordering. The site can be viewed in Chinese and Japanese, and also contains selected information in French, German and Korean. Our eCommerce team works with clients to provide automated processes supporting a wide variety of electronic transactions and all major eProcurement systems. Information contained on our website, or accessed through it, is not part of this Annual Report.

Our GeneGlobe Genes & Pathways web portal ([www.geneglobe.com](http://www.geneglobe.com)) is a valuable outreach to scientists in Pharma and Academia, enabling researchers to search and order from approximately 25 million pre-designed and custom PCR assay kits, NGS assay panels and other products. We have integrated GeneGlobe with our bioinformatics solutions, linking biological interpretation with ordering of relevant assays to accelerate research.

QIAGEN uses a range of tools to provide customers with direct access to technical support, inform them of new product offerings, and enhance our reputation for technical excellence, high-quality products and commitment to service. For example, our technical service hotline allows existing or potential customers to discuss a wide range of questions about our products and molecular biology procedures, online or via phone, with Ph.D. and M.Sc. scientists at QIAGEN. Frequent communication with customers enables us to identify market needs, learn of new developments and opportunities, and respond with new products.

We also distribute publications, including our catalog, to existing and potential customers worldwide, providing new product information, updates, and articles about existing and new applications. In addition, we hold numerous scientific seminars at clinical, academic and industrial research institutes worldwide. We conduct direct marketing campaigns to announce new products and special promotions, and we offer personalized electronic newsletters highlighting molecular biology applications.

For laboratories that frequently rely on our consumables, the QIAstock program maintains inventory onsite to keep up with their requirements. QIAGEN representatives make regular visits to replenish the stock and help with other needs, and we are automating this process with digital technologies. Easy-to-use online ordering, inventory monitoring and customer-driven changes make QIAstock an efficient system for providing ready access to our products for the hundreds of customers worldwide who use this program.

### ***Seasonality***

Our business does not experience significant, predictable seasonality. Historically, a significant portion of our sales have been to researchers, universities, government laboratories and private foundations whose funding is dependent upon grants from government agencies, such as the National Institutes of Health and similar bodies. To the extent that our customers experience increases, decreases or delays in funding arrangements and budget approvals, and to the extent that any of our customers' activities are slowed, such as during times of higher unemployment, vacation periods or delays in the approval of government budgets, we may experience fluctuations in sales volumes during the year or delays from one period to the next in the recognition of sales.

### ***Intellectual Property, Proprietary Rights and Licenses***

We have made and expect to continue to make investments in intellectual property. In 2016, our purchases of intangible assets totaled \$65.6 million. While we do not depend solely on any individual patent or technology, we are significantly dependent in the aggregate on technology that we own or license. Therefore, we consider protection of proprietary technologies and products one of the major keys to our business success. We rely on a combination of patents, licenses and trademarks to establish and protect proprietary rights. As of December 31, 2016, we owned 349 issued patents in the United States, 241 issued patents in Germany and 1,613 issued patents in other major industrialized countries. We had 776 pending patent applications. Our policy is to file patent applications in Western Europe, the United States and Japan. U.S. patents have a term of 17 years from the date of issue (for patents issued from applications submitted prior to June 8, 1995), or 20 years from the date of filing (in the case of patents issued from applications submitted on or after June 8, 1995). Patents in most other countries have a term of 20 years from the date of filing the patent application. We intend to aggressively prosecute and enforce patents and to otherwise protect

our proprietary technologies. We also rely on trade secrets, know-how, continuing technological innovation and licensing opportunities to develop and maintain our competitive position.

Our practice is to require employees, consultants, outside scientific collaborators, sponsored researchers and other advisers to execute confidentiality agreements upon commencement of their relationships with us. These agreements provide that all confidential information developed by or made known to the individual during the course of the relationship is to be kept confidential and not disclosed to third parties, subject to a right to publish certain information in scientific literature in certain circumstances and to other specific exceptions. In the case of our employees, the agreements provide that all inventions conceived by individuals in the course of their employment will be our exclusive property.

See “Principle Risks and Uncertainties” included below for details regarding risks related to our reliance on patents and proprietary rights.

### ***Competition***

In the Academic and Pharma markets, we believe our primary competition in sample technology products involves traditional separation and purification methods, such as phenol extraction, cesium chloride density gradient centrifugation, and precipitation. These methods utilize widely available reagents and other chemicals supplied by companies such as Merck KGaA (MilliporeSigma business). and Roche Diagnostics GmbH (Applied Sciences Division). We compete with these methods through innovative technologies and products, offering a comprehensive solution for nucleic acid collection, pre-treatment, separation and purification needs and providing significant advantages in speed, reliability, convenience, reproducibility and ease of use.

We also experience competition in various markets from other companies providing sample preparation products in kit form and assay solutions. These competitors include, but are not limited to, Promega Corp., EMD Millipore or Merck Millipore, and Macherey-Nagel GmbH for nucleic acid separation and purification; Thermo Fisher and Promega Corp. for assay solutions and for transfection reagents; and Sigma-Aldrich Corp. and Thermo Fisher for protein fractionation products. We believe our proprietary technologies and products offer significant advantages over competitors' products with regard to purity, speed, reliability and ease-of-use.

Some of our other products within our molecular diagnostics customer class, such as tests for Chlamydia, Gonorrhea, hepatitis B virus, herpes simplex virus and CMV, compete against existing screening, monitoring and diagnostic technologies, including tissue culture and antigen-based diagnostic methodologies. Our competitors for gene-based diagnostic probes include Roche Diagnostics, Abbott, Siemens, Cepheid and Hologic. We believe the primary competitive factors in the market for gene-based probe diagnostics and other screening devices are clinical validation, performance and reliability, ease of use, standardization, cost, proprietary position, competitors' market shares, access to distribution channels, regulatory approvals and reimbursement.

We do not believe our competitors typically have the same comprehensive approach to sample to insight solutions as we do or the ability to provide the broad range of technologies and depth of products and services that we offer. With our complete range of manual and fully automated solutions, we believe we offer the value of standardization of procedures and, therefore, more reliable results. We also believe our integrated strategic approach gives us a competitive advantage. The quality of sample technologies-an area in which we have a unique market and leadership position-is a key prerequisite for reliable molecular assay solutions, which increasingly are being applied in emerging markets such as Molecular Diagnostics and Applied Testing.

Current and potential competitors may be in the process of seeking FDA or foreign regulatory approvals for their respective products. Our continued future success will depend in large part on our ability to maintain our technological advantage over competing products, expand our market presence and preserve customer loyalty. There can be no assurance that we will be able to compete effectively in the future or that development by others will not render our technologies or products non-competitive.

### ***Suppliers***

As part of our quality assessment procedures, we periodically evaluate the performance of our raw material and component suppliers, potential new alternative sources of such materials and components, and the risks and benefits of reliance on our existing suppliers. We buy materials for our products from many suppliers, and are not dependent on any one supplier or group of suppliers for our business as a whole. Raw materials generally include chemicals, raw separation media, biologics, plastics and packaging. Raw materials are generally readily available at competitive, stable prices from a number of suppliers. Certain raw materials are produced under our specifications, so we closely monitor stock levels to maintain adequate supplies. We believe we maintain inventories at a sufficient level to ensure reasonable customer service levels and to guard against normal volatility in availability.

### ***Government Regulations***

We are subject to a variety of laws and regulations in the European Union, the United States and other countries. The level and scope of the regulation varies depending on the country or defined economic region, but may include, among other things, the

research, development, testing, clinical trials, manufacture, storage, recordkeeping, approval, labeling, promotion and commercial sales and distribution, of many of our products.

### **European Union Regulations**

In the European Union, *in vitro* diagnostic medical devices (IVDs) are regulated under EU-Directive 98/79/EC (IVD Directive) and corresponding national provisions. The IVD Directive requires that medical devices meet the essential requirements set out in an annex of the directive. These requirements include the safety and efficacy of the devices. According to the IVD Directive, the Member States presume compliance with these essential requirements in respect of devices which are in conformity with the relevant national standards transposing the harmonized standards of which the reference numbers have been published in the Official Journal of the European Communities. These harmonized standards include ISO 13485:2003, the quality standard for medical device manufacturers.

IVD medical devices, other than devices for performance evaluation, must bear the CE marking of conformity when they are placed on the market. The CE mark is a declaration by the manufacturer that the product meets all the appropriate provisions of the relevant legislation implementing the relevant European Directive. As a general rule, the manufacturer must follow the procedure of the EC Declaration of conformity to obtain this CE marking.

Each European country must adopt its own laws, regulations and administrative provisions necessary to comply with the IVD Directive. Member States may not create any obstacle to the placing on the market or the putting into service within their territory of devices bearing the CE marking according to the conformity assessment procedures. On September 26, 2012, the European Commission (EC) adopted a proposal for new EU regulations for medical devices and IVDs that when finalized will impose additional regulatory requirements on IVDs used in the EU. These new regulations are targeted to be signed into law in early 2017 with a 5 year implementation requirement. Once implemented, the entire EU IVD industry will have to comply with the new requirements.

### **Other Country Specific Requirements**

In many countries outside of the United States and the EU, coverage, pricing and reimbursement approvals are also required. Additionally, many of the major markets are adopting regulations and requirements similar to U.S. Food and Drug Administration (FDA) which require additional submission activities and management of country specific regulatory requirements.

We are also required to maintain accurate information and control over sales and distributors' activities that may fall within the purview of the Foreign Corrupt Practices Act, its books and records provisions and its anti-bribery provisions.

### **U.S. Regulations**

In the United States, *in vitro* diagnostic kits are subject to regulation by the FDA as medical devices and must be cleared or approved before they can be marketed. Failure to comply with applicable U.S. requirements may subject a company to a variety of administrative or judicial sanctions, such as FDA refusal to approve pending NDAs, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties and criminal prosecution. In addition, some of our test kits are sold for research use only in the United States. We do not promote these tests for clinical diagnostic use, and they are labeled "For Research Use Only," or RUO, as required by the FDA.

#### *In Vitro Diagnostics*

The FDA regulates the sale or distribution of medical devices, including *in vitro* diagnostic test kits and some Lab Developed Tests (LDTs). The information that must be submitted to the FDA in order to obtain clearance or approval to market a new medical device varies depending on how the medical device is classified by the FDA. Medical devices are classified into one of three classes on the basis of the controls deemed by the FDA to be necessary to reasonably ensure their safety and effectiveness. Class I devices are subject to general controls, including labeling, pre-market notification and adherence to the FDA's quality system regulations, which are device-specific good manufacturing practices. Class II devices are subject to general controls and special controls, including performance standards and post-market surveillance. Class III devices are subject to most of the previously identified requirements as well as to pre-market approval. All Class I devices are exempt from premarket review; most Class II devices require 510(k) clearance, and all Class III devices must receive premarket approval before they can be sold in the United States. The payment of a fee, that is subject to frequent adjustment, to the FDA is usually required when a 510(k) notice or premarket approval application is submitted.

*510(k) Premarket Notification.* A 510(k) notification requires the sponsor to demonstrate that a medical device is substantially equivalent to another marketed device, termed a "predicate device", that is legally marketed in the United States and for which a premarket approval application (PMA) was not required. A device is substantially equivalent to a predicate device if it has the same intended use and technological characteristics as the predicate; or has the same intended use but different technological characteristics, where the information submitted to the FDA does not raise new questions of safety and effectiveness and

demonstrates that the device is at least as safe and effective as the legally marketed device.

The FDA generally issues a decision letter within 90 days of receipt of the 510(k) if it has no additional questions or sends a first action letter requesting additional information within 75 days. Most 510(k)s do not require clinical data for clearance, but a minority will. Requests for additional data, including clinical data, will increase the time necessary to review the notice. If the FDA believes that the device is not substantially equivalent to a predicate device, it will issue a “Not Substantially Equivalent” letter and designate the device as a Class III device, which will require the submission and approval of a PMA before the new device may be marketed. Under certain circumstances, the sponsor may petition the FDA to make a risk-based determination of the new device and reclassify the new device as a Class I or Class II device. The FDA continues to reevaluate the 510(k) review process, and we cannot predict what if any changes will occur.

*Premarket Approval.* The PMA process is more complex, costly and time consuming than the 510(k) process. A PMA must be supported by more detailed and comprehensive scientific evidence, including clinical data, to demonstrate the safety and efficacy of the medical device for its intended purpose. If the device is determined to present a “significant risk,” the sponsor may not begin a clinical trial until it submits an investigational device exemption (IDE) to the FDA and obtains approval to begin the trial.

After the PMA is submitted, the FDA has 45 days to make a threshold determination that the PMA is sufficiently complete to permit a substantive review. If the PMA is complete, the FDA will file the PMA. The FDA is subject to a performance goal review time for a PMA that is 180 days from the date of filing, although in practice this review time is longer. Questions from the FDA, requests for additional data and referrals to advisory committees may delay the process considerably. The total process may take several years and there is no guarantee that the PMA will ever be approved. Even if approved, the FDA may limit the indications for which the device may be marketed. The FDA may also request additional clinical data as a condition of approval or after the PMA is approved. Any changes to the medical device may require a supplemental PMA to be submitted and approved before changed medical device may be marketed.

Any products sold by us pursuant to FDA clearances or approvals will be subject to pervasive and continuing regulation by the FDA, including record keeping requirements, reporting of adverse experiences with the use of the device and restrictions on the advertising and promotion of our products. Device manufacturers are required to register their establishments and list their devices with the FDA and are subject to periodic inspections by the FDA and certain state agencies. Noncompliance with applicable FDA requirements can result in, among other things, warning letters, fines, injunctions, civil penalties, recalls or seizures of products, total or partial suspension of production, refusal of the FDA to grant 510(k) clearance or PMA approval for new devices, withdrawal of 510(k) clearances and/or PMA approvals and criminal prosecution.

#### *Regulation of Companion Diagnostic Devices*

If a sponsor or the FDA believes that a diagnostic test is essential for the safe and effective use of a corresponding therapeutic product, the sponsor of the therapeutic product will typically work with a collaborator to develop an in vitro companion diagnostic device, or IVD. IVDs are regulated by the FDA as medical devices. The FDA issued a final guidance document in 2014, entitled “In Vitro Companion Diagnostic Devices” that is intended to assist companies developing in vitro companion diagnostic devices and companies developing therapeutic products that depend on the use of a specific in vitro companion diagnostic for the safe and effective use of the product. The FDA defined an IVD companion diagnostic device as a device that provides information that is essential for the safe and effective use of a corresponding therapeutic product. The FDA expects that the therapeutic sponsor will address the need for an approved or cleared IVD companion diagnostic device in its therapeutic product development plan and that, in most cases, the therapeutic product and its corresponding IVD companion diagnostic will be developed contemporaneously.

It also issued a draft guidance on July 15, 2016, entitled, “Principles for Codevelopment of an In Vitro Companion Diagnostic Device with a Therapeutic Product” to serve as a practical guide to assist therapeutic product sponsors and IVD sponsors in developing a therapeutic product and an accompanying IVD companion diagnostic.

The FDA indicated that it will apply a risk-based approach to determine the regulatory pathway for IVD companion diagnostic devices, as it does with all medical devices. This means that the regulatory pathway will depend on the level of risk to patients, based on the intended use of the IVD companion diagnostic device and the controls necessary to provide a reasonable assurance of safety and effectiveness. The two primary types of marketing pathways for medical devices are clearance of a premarket notification under Section 510(k) of the Federal Food, Drug, and Cosmetic Act, or 510(k), and approval of a premarket approval application, or PMA. We expect that any IVD companion diagnostic device developed for use with our drug candidates will utilize the PMA pathway and that a clinical trial performed under an investigational device exemption, or IDE, will have to be completed before the PMA may be submitted.

The FDA expects that the therapeutic sponsor will address the need for an IVD companion diagnostic device in its therapeutic product development plan and that, in most cases, the therapeutic product and its corresponding IVD companion diagnostic device will be developed contemporaneously. If the companion diagnostic test will be used to make critical treatment decisions

such as patient selection, treatment assignment, or treatment arm, it will likely be considered a significant risk device for which a clinical trial will be required.

The sponsor of the IVD companion diagnostic device will be required to comply with the FDA's IDE requirements that apply to clinical trials of significant risk devices. If the diagnostic test and the therapeutic drug are studied together to support their respective approvals, the clinical trial must meet both the IDE and IND requirements.

PMA's must be supported by valid scientific evidence, which typically requires extensive data, including technical, preclinical, clinical and manufacturing data, to demonstrate to the FDA's satisfaction the safety and effectiveness of the device. For diagnostic tests, a PMA typically includes data regarding analytical and clinical validation studies. As part of its review of the PMA, the FDA will conduct a pre-approval inspection of the manufacturing facility or facilities to ensure compliance with the Quality System Regulation, or QSR, which requires manufacturers to follow design, testing, control, documentation and other quality assurance procedures. FDA review of an initial PMA may require several years to complete.

If the FDA evaluations of both the PMA and the manufacturing facilities are favorable, the FDA will either issue an approval order or an approvable letter, which usually contains a number of conditions that must be met in order to secure the final approval of the PMA. If the FDA's evaluation of the PMA or manufacturing facilities is not favorable, the FDA will send the applicant a not approvable letter or an order denying approval. A not approvable letter will outline the deficiencies in the application and, where practical, will identify what is necessary to make the PMA approvable. The FDA may also determine that additional clinical trials are necessary, in which case the PMA approval may be delayed for several months or years while the trials are conducted and then the data submitted in an amendment to the PMA. Once granted, PMA approval may be withdrawn by the FDA if compliance with post approval requirements, conditions of approval or other regulatory standards is not maintained or problems are identified following initial marketing.

After approval, the use of an IVD companion diagnostic device with a therapeutic product will be stipulated in the instructions for use in the labeling of both the diagnostic device and the corresponding therapeutic product. In addition, a diagnostic test that was approved through the PMA process or one that was cleared through the 510(k) process and placed on the market will be subject to many of the same regulatory requirements that apply to approved drugs. The FDA has approved a number of drug/diagnostic device companions in accordance with the Guidance.

In September 2013, the FDA issued its final rule on the Unique Device Identifier. This rule now requires an additional registered identifier, including a special barcode, on all FDA regulated medical devices. The rule is implemented in phases with the first deadline of September 24, 2014 being established for all Class III medical devices. For QIAGEN, this impacted the *hc2*, *QuantiFERON*, and *therascreen* products. We established a task force to ensure that the deadline was met but this will place additional administrative and regulatory burden on us related to the annual reporting of compliance of these products to the new regulation. Class II and Class I products are required to have this same labeling as of September 24, 2016 and 2018, respectively. QIAGEN was fully compliant with the new rule by the September 2014 and 2016 deadlines and we continue to work to ensure that we will be able to meet the remaining deadlines. The new rule will also require additional compliance oversight now that it has been implemented. The requirements are now required to be confirmed as part of our annual reporting and PMA submissions. They are also assessed during site inspections by the U.S. FDA.

Some of our products are sold for research purposes in the U.S., and labeled "For Research Use Only" (RUO) or "for molecular biology applications." In November 2013, the FDA issued a final Guidance for Industry and Food and Drug Administration Staff entitled, "Distribution of In Vitro Diagnostic Products Labeled for Research Use Only or Investigational Use Only." In the Guidance, RUO refers to devices that are in the laboratory phase of development, and investigational use only, or IUO, refers to devices that are in the product testing phase of development. These types of devices are exempt from most regulatory controls. Because we do not promote our RUOs for clinical diagnostic use or provide technical assistance to clinical laboratories with respect to these tests, we believe that these tests are exempt from FDA's premarket review and other requirements. If the FDA were to disagree with our designation of any of these products, we could be forced to stop selling the product until we obtain appropriate regulatory clearance or approval. Further, it is possible that some of our RUOs may be used by some customers without our knowledge in their LDTs, which they develop, validate and promote for clinical use. However, as previously noted, we do not promote these products for use in LDTs or assist in the development of the LDTs for clinical diagnostic use.

On October 3, 2014, the FDA published notices in the Federal Register formally announcing their release and the beginning of a 120-day public comment period, which ended on February 2, 2015, for the Draft Guidance for Industry, Food and Drug Administration Staff, and Clinical Laboratories: Framework for Regulatory Oversight of Laboratory Developed Tests (LDTs), and Docket No. FDA-2011-D-0357 for Draft Guidance for Industry, Food and Drug Administration Staff, and Clinical Laboratories: FDA Notification and Medical Device Reporting for Laboratory Developed Tests (LDTs). These draft Guidances were withdrawn in January 2017, and replaced by an informal non-enforceable discussion paper reflecting some of the feedback that it received from QIAGEN and other companies and industry groups. It is not possible to precisely assess the potential impact of the discussion paper on the issuance of any new draft Guidance or regulation. QIAGEN has an executive

task force that is monitoring and participating in the draft process to insure the earliest possible awareness of new developments in this area.

#### *HIPAA and Other Privacy and Security Laws*

Numerous privacy and data security laws apply to personal information, including health information. These laws vary in their application. For example, the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act, and their implementing regulations (HIPAA), regulate the uses, disclosures and security of identifiable health information (protected health information or PHI) in the hands of certain health care providers, health plans or health care clearing houses (covered entities). HIPAA regulates and limits covered entities' uses and disclosures of PHI and requires the implementation of administrative, physical and technical safeguards to keep PHI secure. HIPAA also applies to organizations that create, receive, maintain or transmit PHI to provide services to or for or on behalf of covered entities (business associates). Business associates and certain of their subcontractors are required to comply with certain privacy and all of the security standards of HIPAA. Business associates and covered entities must also comply with breach notification standards established by HIPAA. The HIPAA breach notification standards require covered entities to notify affected individuals, the government, and in some cases, local and national media in the event of a breach of PHI that has not been secured by encryption. The breach notification standards require business associates to notify covered entity customers of their own breaches of unsecured PHI so that the relevant covered entity may make required notifications. If we were to act as a HIPAA covered entity or business associate, we would be subject to these obligations.

Almost all states have adopted data breach notification laws relating to the "personal information" of its residents. Personal information typically includes an individual's name or initials coupled with social security, financial account, debit, credit or state-issued identification number or other information that could lead to identity theft. There is significant variability under these laws, but most require notification to affected individuals (and some require notification to the government) in the event of breach. Other laws of some states require that we comply with data security obligations. These laws may apply to us when we receive or maintain personal information regarding individuals, including our employees.

The Genetic Information Nondiscrimination Act of 2008, also referred to as GINA, is a federal law that protects individuals from discrimination in the health insurance and employment contexts because of DNA characteristics that may affect their health. GINA prohibits covered employers from requesting, obtaining, or using employees' genetic information (subject to limited exceptions), and prohibits covered health insurers from requesting genetic information or using any such information they may already have for purposes of making eligibility, premium, or coverage-related decisions.

Many states have also adopted genetic testing and privacy laws. These laws typically require a specific, written consent for genetic testing as well as consent for the disclosure of genetic test results and otherwise limit uses and disclosures of genetic testing results. A few states have adopted laws that give their residents property rights in their genetic information. Most of our institutional and physician customers are covered entities under HIPAA and must obtain proper authorization or de-identify information so that we may provide services. When PHI is de-identified in accordance with HIPAA or when the disclosure of PHI is authorized by a patient, HIPAA does not impose any compliance obligations on the recipient, but our use and disclosure of the information may be limited by contract or the terms of the authorization.

We are subject to enforcement by state attorneys general who have authority to enforce state data privacy or security laws. Accordingly, we maintain an active privacy and data security program designed to address applicable regulatory compliance requirements.

Privacy and data security laws, including those relating to health information, are complex, overlapping and rapidly evolving. As our activities evolve and expand, additional laws may be implicated, for example, there are non-U.S. privacy laws that impose restrictions on the transfer, access, use, and disclosure of health and other personal information. All of these laws impact our business either directly or indirectly. Our failure to comply with applicable privacy or security laws or significant changes in these laws could significantly impact our business and future business plans. For example, we may be subject to regulatory action or lawsuits in the event we fail to comply with applicable privacy laws. We may face significant liability in the event any of the personal information we maintain is lost or otherwise subject to misuse or other wrongful use, access or disclosure.

#### *Compliance with Fraud and Abuse Laws*

We have to comply with various U.S. federal and state laws, rules and regulations pertaining to healthcare fraud and abuse, including anti-kickback laws and physician self-referral laws, rules and regulations. Violations of the fraud and abuse laws are punishable by criminal and civil sanctions, including, in some instances, exclusion from participation in federal and state healthcare programs, including Medicare and Medicaid.

#### *Anti-Kickback Statute*

The federal Anti-Kickback Statute prohibits persons from knowingly or willfully soliciting, receiving, offering or paying

remuneration, directly or indirectly, in exchange for or to induce:

- The referral of an individual for a service or product for which payment may be made by Medicare, Medicaid or other government-sponsored healthcare program; or
- Purchasing, ordering, arranging for, or recommending the ordering of, any service or product for which payment may be made by a government-sponsored healthcare program.

The definition of “remuneration” has been broadly interpreted to include anything of value, including such items as gifts, certain discounts, waiver of payments, and providing anything at less than its fair market value. In addition, several courts have interpreted the law to mean that if “one purpose” of an arrangement is intended to induce referrals, the statute is violated.

The Anti-Kickback Statute is broad and prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. Recognizing that the Anti-Kickback Statute is broad and may technically prohibit many innocuous or beneficial arrangements, the Office of Inspector General of the Department of Health and Human Services (OIG) has issued regulations, commonly known as “safe harbors.” These safe harbors set forth certain requirements that, if fully met, will assure healthcare providers, including medical device manufacturers, that they will not be prosecuted under the Anti-Kickback Statute. Although full compliance with these safe harbor provisions ensures against prosecution under the Anti-Kickback Statute, full compliance is often difficult and the failure of a transaction or arrangement to fit within a specific safe harbor does not necessarily mean that the transaction or arrangement is illegal or that prosecution under the Anti-Kickback Statute will be pursued. However, conduct and business arrangements that do not fully satisfy each applicable safe harbor may result in increased scrutiny by government enforcement authorities such as the OIG. The statutory penalties for violating the Anti-Kickback Statute include imprisonment for up to five years and criminal fines of up to \$25,000 per violation. In addition, through application of other laws, conduct that violates the Anti-Kickback Statute can also give rise to False Claims Act lawsuits, civil monetary penalties and possible exclusion from Medicare and Medicaid and other federal healthcare programs. In addition to the Federal Anti-Kickback Statute, many states have their own kickback laws. Often, these laws closely follow the language of the federal law, although they do not always have the same scope, exceptions, safe harbors or sanctions. In some states, these anti-kickback laws apply not only to payment made by a government health care program but also with respect to other payors, including commercial insurance companies.

#### *Other Fraud and Abuse Laws*

The federal False Claims Act (FCA) prohibits any person from knowingly presenting, or causing to be presented, a false claim or knowingly making, or causing to be made, a false statement to obtain payment from the federal government. Those found in violation of the FCA can be subject to fines and penalties of three times the damages sustained by the government, plus mandatory civil penalties of between \$5,500 and \$11,000 for each separate false claim. Actions filed under the FCA can be brought by any individual on behalf of the government, a “qui tam” action, and such individual, known as a “relator” or, more commonly, as a “whistleblower,” who may share in any amounts paid by the entity to the government in damages and penalties or by way of settlement. In addition, certain states have enacted laws modeled after the FCA, and this legislative activity is expected to increase. Qui tam actions have increased significantly in recent years, causing greater numbers of healthcare companies, including medical device manufacturers, to defend false claim actions, pay damages and penalties or be excluded from Medicare, Medicaid or other federal or state healthcare programs as a result of investigations arising out of such actions.

The OIG also has authority to bring administrative actions against entities for alleged violations of a number of prohibitions, including the Anti-Kickback Statute and the Stark Law. The OIG may seek to impose civil monetary penalties or exclusion from the Medicare, Medicaid and other federal healthcare programs. Civil monetary penalties can range from \$2,000 to \$50,000 for each violation or failure plus, in certain circumstances, three times the amounts claimed in reimbursement or illegal remuneration. Typically, exclusions last for five years.

In addition, we must comply with a variety of other laws, such as laws prohibiting false claims for reimbursement under Medicare and Medicaid, all of which can also be triggered by violations of federal anti-kickback laws; the Health Insurance Portability and Accounting Act of 1996, which makes it a federal crime to commit healthcare fraud and make false statements; and the Federal Trade Commission Act and similar laws regulating advertisement and consumer protections.

There are also an increasing number of state “sunshine” laws that require manufacturers to provide reports to state governments on pricing and marketing information. Several states have enacted legislation requiring medical device companies to, among other things, establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales and marketing activities, and to prohibit or limit certain other sales and marketing practices. In addition, a federal law known as the Physician Payments Sunshine Act, requires medical device manufacturers to track and report to the federal government certain payments and other transfers of value made to physicians and teaching hospitals and ownership or investment interests held by physicians and their immediate family members. The federal government discloses the reported information on a publicly available website. If we fail to track and report as required by these laws or to otherwise comply with these laws, we could be subject to the penalty provisions of the pertinent state and federal authorities.

We are subject to laws and regulations related to the protection of the environment, the health and safety of employees and the handling, transportation and disposal of medical specimens, infectious and hazardous waste and radioactive materials. For example, the U.S. Occupational Safety and Health Administration (OSHA) has established extensive requirements relating specifically to workplace safety for healthcare employers in the U.S. This includes requirements to develop and implement multi-faceted programs to protect workers from exposure to blood-borne pathogens, such as HIV and hepatitis B and C, including preventing or minimizing any exposure through needle stick injuries. For purposes of transportation, some biological materials and laboratory supplies are classified as hazardous materials and are subject to regulation by one or more of the following agencies: the U.S. Department of Transportation, the U.S. Public Health Service, the United States Postal Service and the International Air Transport Association.

## **Reimbursement**

### ***United States***

In the United States, payments for diagnostic tests come from several sources, including third party payors such as health maintenance organizations and preferred provider organizations; government health programs such as Medicare and Medicaid; and, in certain circumstances, hospitals, referring laboratories or the patients themselves. For many years, federal and state governments in the United States have pursued methods to reduce the cost of these programs. For example, in 2010, the United States enacted major healthcare reform legislation known as the Patient Protection and Affordable Care Act (ACA). Such changes have had, and are expected to continue to have, an impact on our business. At present, Medicare payment rates are affected by across-the-board federal budget cuts commonly referred to as “sequestration.” Under sequestration, the Centers for Medicare & Medicaid Services (CMS), the federal agency responsible for administering Medicare and Medicaid, reduced Medicare payments to providers by 2% annually beginning in 2013 and through 2023.

*Code Assignment.* In the United States, a third-party payor's decisions regarding coverage and payment are impacted, in large part, by the specific Current Procedural Terminology, or CPT, code used to identify a test. The American Medical Association, or AMA, publishes the CPT, which is a listing of descriptive terms and identifying codes for reporting medical services and procedures. The purpose of the CPT is to provide a uniform language that accurately describes medical, surgical, and diagnostic services and therefore to ensure reliable nationwide communication among healthcare providers, patients, and third-party payors.

A manufacturer of in vitro diagnostic kits or a provider of laboratory services may request establishment of a Category I CPT code for a new product. Assignment of a specific CPT code ensures routine processing and payment for a diagnostic test by both private and government third-party payors.

The AMA has specific procedures for establishing a new CPT code and, if appropriate, for modifying existing nomenclature to incorporate a new test into an existing code. If the AMA concludes that a new code or modification of nomenclature is unnecessary, the AMA will inform the requestor how to use one or more existing codes to report the test.

While the AMA's decision is pending, billing and collection may be sought under an existing, non-specific CPT code. A manufacturer or provider may decide not to request assignment of a CPT code and instead use an existing, non-specific code for reimbursement purposes. However, use of such codes may result in more frequent denials and/or requests for supporting clinical documentation from the third-party payor and in lower reimbursement rates, which may vary based on geographical location.

In 2012, the AMA added 127 new CPT codes for molecular pathology services that became effective on January 1, 2013. These new CPT codes are biomarker specific and were designed to replace the previous methodology of billing for molecular pathology testing, which involved “stacking” a series of non-biomarker specific CPT codes together to describe the testing performed. The new CPT codes were issued final national reimbursement prices by CMS in November of 2013. These federal reimbursement amounts are widely acknowledged to be lower than the reimbursement obtained by the now outdated “stacking” method, but commercial payors and Medicare contractors are still in the process of solidifying their coverage and reimbursement policies for the testing described by these new CPT codes. The lower reimbursement amounts experienced in the field of molecular pathology testing may soon be extending to other codes on the Clinical Laboratory Fee Schedule as CMS begins to base CPT laboratory code payment on third party payer rates in 2017, per the Protecting Access to Medicare Act (PAMA) passed in April 2014.

*Coverage Decisions.* When deciding whether to cover a particular diagnostic test, private and government third-party payors generally consider whether the test is a contractual benefit and, if so, whether it is reasonable and necessary for the diagnosis or treatment of illness and injury. Most third-party payors do not cover experimental services. Coverage determinations often are influenced by current standards of practice and clinical data, particularly at the local level. The Centers for Medicare & Medicaid Services (CMS) which is the government agency responsible for overseeing the Medicare program, has the authority

to make coverage determinations on a national basis, but most Medicare coverage decisions are made at the local level by contractors that administer the Medicare program in specified geographic areas. Private and government third-party payors have separate processes for making coverage determinations, and private third-party payors may or may not follow Medicare's coverage decisions. If a third-party payor has a coverage determination in place for a particular diagnostic test, billing for that test must comply with the established policy. Otherwise, the third-party payor makes reimbursement decisions on a case-by-case basis.

*Payment.* Payment for covered diagnostic tests is determined based on various methodologies, including prospective payment systems and fee schedules. In addition, private third-party payors may negotiate contractual rates with participating providers or set rates as a percentage of the billed charge. Diagnostic tests furnished to Medicare inpatients generally are included in the bundled payment made to the hospital under Medicare's Inpatient Prospective Payment System, utilizing Diagnosis Related Groups (DRGs) depending on the patient's condition. Payment for diagnostic tests furnished to Medicare beneficiaries in outpatient circumstances is made based on the Clinical Laboratory Fee Schedule, under which a payment amount is assigned to each covered CPT code, or through the Outpatient Prospective Payment System (OPPS), which is the outpatient equivalent of the DRG model. The law technically requires fee schedule amounts to be adjusted annually by the percentage increase in the consumer price index (CPI) for the prior year, but Congress has frozen payment rates in certain years. Medicaid programs generally pay for diagnostic tests based on a fee schedule, but reimbursement varies by state.

### ***European Union***

In the European Union, the reimbursement mechanisms used by private and public health insurers vary by country. For the public systems, reimbursement is determined by guidelines established by the legislator or responsible national authority. As elsewhere, inclusion in reimbursement catalogues focuses on the medical usefulness, need, quality and economic benefits to patients and the healthcare system. Acceptance for reimbursement comes with cost, use and often volume restrictions, which again can vary by country.

### **Conflict Minerals**

Recent U.S. legislation has been enacted to improve transparency and accountability concerning the sourcing of conflict minerals from mines located in the conflict zones of the Democratic Republic of Congo (DRC) and its adjoining countries. The term conflict minerals currently encompasses tantalum, tin, tungsten (or their ores) and gold. Certain of our instrumentation product components which we purchase from third party suppliers contain gold. This U.S. legislation requires manufacturers, such as us, to investigate our supply chain and disclose if there is any use of conflict minerals originating in the DRC or adjoining countries. We conduct due diligence measures annually to determine the presence of conflict minerals in our products and the source of any such conflict minerals. Because we do not purchase conflict minerals directly from smelters or refineries, we rely on our suppliers to specify to us their Conflict Minerals sources and declare their conflict minerals status. We disclosed our most recent Conflict Minerals findings to the Securities Exchange Commission for the calendar year ending December 31, 2015 on Form SD on May 25, 2016 and will provide updated disclosure to the Securities Exchange Commission as required.

### **Organizational Structure**

QIAGEN N.V. is the holding company for more than 50 consolidated subsidiaries, many of which have the primary function of distributing our products and services on a regional basis. Certain subsidiaries also have research and development or production activities. A listing of our significant subsidiaries and their jurisdictions of incorporation is included in Note 28, 'Consolidated Companies'.

### **Description of Property**

Our production and manufacturing facilities for consumable products are located in Germany, the United States, China, and the United Kingdom. Our facilities for software development are located in the United States, Germany, Poland and Romania. In recent years, we have made investments in automated and interchangeable production equipment to increase our production capacity and improve efficiency. Our production and manufacturing operations are highly integrated and benefit from sophisticated inventory control. Production management personnel are highly qualified, and many have advanced degrees in engineering, business and science. We also have installed and continue to expand production-planning systems that are included in our integrated information and control system based on the SAP R/3 business software package from SAP AG. Worldwide, we use SAP software to integrate most of our operating subsidiaries. Capital expenditures for property, plant and equipment totaled \$28.3 million, \$47.6 million for 2016 and 2015, respectively.

We have an established quality system, including standard manufacturing and documentation procedures, intended to ensure that products are produced and tested in accordance with the FDA's Quality System Regulations, which impose current Good Manufacturing Practice (cGMP) requirements. For cGMP production, special areas were built in our facilities in Hilden, Germany, and Germantown, Maryland. These facilities operate in accordance with cGMP requirements.

The consumable products manufactured at QIAGEN GmbH in Germany, and QIAGEN Sciences LLC in Maryland, are produced under ISO 9001: 2008, ISO 13485:2012, ISO 13485:2003 CMDCAS. Our certifications form part of our ongoing commitment to provide our customers with high-quality, state-of-the-art sample and assay technologies under our Total Quality Management system.

Our facilities in Hilden, Germany, currently occupy a total of approximately 776,000 square feet, some of which is leased pursuant to separate contracts, the last of which expires in 2018. In December 2016, we signed a contract to purchase additional office and warehouse space of approximately 4,400 square feet which we plan to occupy in the first quarter of 2017. During 2015, we purchased additional office and warehouse space of approximately 23,700 square feet. Our production capacity is increased through our manufacturing and research facilities in the United States. QIAGEN Sciences, LLC owns a 24-acre site in Germantown, Maryland. The 285,000 square foot Germantown facility consists of several buildings in a campus-like arrangement and can accommodate over 500 employees. There is room for future expansion of up to 300,000 square feet of facility space. In 2015, we completed expansion of our research and production facilities in Hilden, Germany and renovations of administrative facilities in Germantown, Maryland.

We lease a facility in Frederick, Maryland comprising a total of 42,000 square feet for manufacturing, warehousing, distribution and research operations. We also lease facilities in Massachusetts with 44,400 square feet in Waltham for GeneReader NGS system development and 39,100 square feet in Beverly for enzyme manufacturing. Our California sites have a total of 33,500 square feet in Redwood City for Bioinformatics. Additionally, we lease smaller facilities in Shenzhen, China and Manchester, United Kingdom for manufacturing, warehousing, distribution and research operations. In 2015, we completed expansion work in Manchester to add additional research and development space. Other subsidiaries throughout the world lease smaller amounts of space. Our corporate headquarters are located in leased office space in Venlo, The Netherlands.

We believe our existing production and distribution facilities can support anticipated production needs for the next 36 months. Our production and manufacturing operations are subject to various federal, state, and local laws and regulations including environmental regulations. We do not believe we have any material issues relating to these laws and regulations.

## **Operating and Financial Review and Prospects for the Period from January 1, 2016 to December 31, 2016**

### **Results of Operations, Financial Position**

#### ***Results of Operations***

##### *Overview*

We are a leading global provider of Sample to Insight solutions to transform biological materials into valuable molecular insights. QIAGEN sample technologies isolate and process DNA, RNA and proteins from any biological sample, such as blood or tissue. Assay technologies make these biomolecules visible and ready for analysis, such as identifying the DNA of a virus or a mutation of a gene. Bioinformatics solutions integrate software and cloud-based resources to interpret increasing volumes of biological data and report relevant, actionable insights. Our automation solutions tie these together in seamless and cost-effective molecular testing workflows.

We sell our products - consumables, automated instrumentation systems using those technologies, and bioinformatics to analyze and interpret the data - to four major customer classes:

- **Molecular Diagnostics** - healthcare providers engaged in many aspects of patient care including our three priority focus areas of oncology, infectious diseases and immune monitoring
- **Applied Testing** - government or industry customers using molecular technologies in fields such as forensics, veterinary diagnostics and food safety testing
- **Pharma** - pharmaceutical and biotechnology companies using molecular testing to support drug discovery, translational medicine and clinical development efforts
- **Academia** - researchers exploring the secrets of life such as the mechanisms and pathways of diseases, and in some cases translating that research into drug targets or commercial applications

We market products in more than 130 countries, mainly through subsidiaries in markets we believe have the greatest sales potential in Europe, Asia, the Americas and Australia. We also work with specialized independent distributors and importers. As of December 31, 2016, we employed approximately 4,700 people in more than 35 locations worldwide.

##### *Recent Acquisitions*

We have made a number of strategic acquisitions since 2015, targeting innovative technologies to achieve market-leading

positions in high-growth areas of molecular diagnostics and research. These transactions have expanded our product offerings and technology platforms, as well as our geographic presence. They include:

- In January 2017, QIAGEN acquired OmicSoft Corporation, a privately held company based in the Research Triangle area of North Carolina, to expand our industry-leading bioinformatics offering with complementary solutions enabling scientists to visualize and mine large institutional and publicly available “omics” datasets. The OmicSoft software solutions meet a growing need in discovery and translational research to access and manage huge amounts of data on DNA, RNA and other biological variables generated by next-generation sequencing studies.
- During 2016, QIAGEN acquired Exiqon A/S, a publicly traded company based in Vedbaek, Denmark, expanding our leadership position in Sample to Insight solutions for RNA analysis. Exiqon’s RNA analysis solutions, with proprietary Locked Nucleic Acid (LNA) technology, are used by academic, biotech and pharmaceutical researchers worldwide to explore correlations between gene activity and the development of cancer and other diseases. On June 28, 2016, we paid DKK 627.4 million (\$95.2 million) for approximately 94.52% of the outstanding common shares of Exiqon. We acquired the remaining Exiqon shares subsequent to the acquisition date for \$5.5 million in cash and held 100% of the shares as of December 31, 2016.
- In November 2015, we acquired MO BIO Laboratories, Inc., a privately-held provider of cutting-edge sample technologies for studies of the microbiome and metagenomics, analyzing the impact of microbial diversity on health and the environment. The acquisition added a complementary portfolio of sample technologies to QIAGEN's universal solutions for next-generation sequencing. MO BIO kits, based on proprietary Inhibitor Removal Technology, enable the isolation of pure DNA from challenging samples like soil, water, plants and stool.
- In March 2015, we acquired an innovative technology that enables enrichment and molecular analysis of circulating tumor cells (CTCs) from blood samples from AdnaGen GmbH, a subsidiary of Alere Inc. The acquisition added to QIAGEN’s pipeline of technologies for molecular testing through non-invasive liquid biopsies as an alternative to costly and risky tissue biopsies. Other assets acquired include two marketed CE-IVD marked products, AdnaTest BreastCancer and AdnaTest Prostate Cancer, for treatment monitoring and detection of tumor relapse.
- In February 2015, we announced the spin-off of teams and activities of QIAGEN Marseille S.A. (formerly Ipsogen S.A.), a majority-owned and fully consolidated entity. In the divestiture, QIAGEN Marseille agreed to the sale of all its assets and liabilities, with the exception of its intellectual property portfolio, to a stand-alone company. QIAGEN retained rights to commercialize the *ipsogen* line of products, including companion diagnostics for blood cancers. As part of this initiative, we made a tender offer to acquire the remaining QIAGEN Marseille shares. We acquired those shares during 2015 and 2016 and held 100% of the QIAGEN Marseille shares as of December 31, 2016.

Our financial results include the contributions of recent acquisitions and the QIAGEN Marseille spin-off from their effective dates, as well as costs related to the transactions and integration of the acquired companies, such as the relocation and closure of certain facilities.

We determined that we operate as one business segment in accordance with IFRS 8, *Operating Segments*. Our chief operating decision maker (CODM) makes decisions on business operations and resource allocation based on evaluations of the QIAGEN Group as a whole. Considering the acquisitions made during 2016, we determined that we still operate as one business segment. We provide certain revenue information by customer class to allow better insight into our operations. This information is estimated using certain assumptions to allocate revenue among the customer classes.

### ***Year Ended December 31, 2016, Compared to 2015***

#### *Net Sales*

In 2016, net sales grew 4% to \$1.34 billion compared to \$1.28 billion in 2015, including two percentage points of adverse currency movements. Excluding the effect of adverse currency movements, organic business expansion contributed four percentage points to total sales growth while nearly two percentage points of additional growth came from the December 2015 acquisition of MO BIO Laboratories Inc, a leader in sample technologies for metagenomics and microbiome analysis, and the June 2016 acquisition of Exiqon A/S, a leader in RNA analysis technologies. Excluding the expected impact of sharply lower U.S. sales of HPV tests, which created approximately two percentage points of headwind, as well as the effect of adverse currency movements, net sales rose approximately 8% in 2016. All regions and customer classes supported higher sales of consumables and related revenues (+5% / 87% of sales) and instruments (+3% / 13% of sales).

#### **Net sales by geographic region**

|                                       | Full-year 2016     |             |               |
|---------------------------------------|--------------------|-------------|---------------|
|                                       | Sales<br>(In \$ m) | %<br>change | % of<br>sales |
| Americas <sup>(1)</sup>               | \$627              | 4%          | 47%           |
| Europe / Middle East / Africa         | \$428              | 4%          | 32%           |
| Asia-Pacific / Japan                  | \$279              | 10%         | 21%           |
| Top 7 emerging markets <sup>(2)</sup> | \$209              | 13%         | 16%           |

(1) Americas excluding U.S. HPV (+6%)

(2) Top 7 emerging markets: Brazil, Russia, India, China, South Korea, Mexico and Turkey.

FY 2016: Rest of world represented less than 1% of net sales.

**Geographic regions:** The Asia-Pacific / Japan region led the geographic performance with 10% growth in 2016 reflecting adverse currency movements of one percentage point of sales growth, benefiting from key contributions from China, South Korea and India. The Americas advanced at a faster pace (+6%) when excluding U.S. HPV test sales on higher sales of the QuantiFERON-TB test and improved conditions among Life Science customers. Europe / Middle East / Africa advanced 4% reflecting adverse currency movements of approximately four percentage points of sales growth while experiencing expansion in markets such as France, the United Kingdom, Turkey and the Middle East. Turkey, China, South Korea, India and Brazil were key contributors (+13% / 16% of sales) when excluding adverse currency movements of 6 percentage points.

**Customer classes:** An overview of performance in QIAGEN's four customer classes:

#### Net sales by product category and customer class

|                                       | Full-year 2016     |             |               |
|---------------------------------------|--------------------|-------------|---------------|
|                                       | Sales<br>(In \$ m) | %<br>change | % of<br>sales |
| Consumables and related revenues      | \$1,166            | 5%          | 87%           |
| Instruments                           | \$172              | 3%          | 13%           |
| Molecular Diagnostics <sup>(1)</sup>  | \$663              | 4%          | 50%           |
| Of which: U.S. HPV test solutions     | \$33               | -29%        | 3%            |
| MDx excluding U.S. HPV <sup>(1)</sup> | \$630              | 7%          | 47%           |
| Applied Testing                       | \$120              | 5%          | 9%            |
| Pharma                                | \$262              | 5%          | 19%           |
| Academia                              | \$293              | 4%          | 22%           |

(1) Includes companion diagnostic co-development revenues (\$32 million, -8%)

**Molecular Diagnostics**, which contributed approximately 50% of net sales, expanded by 4% in 2016 reflecting adverse currency movements of three percentage points of sales growth. The core portfolio delivered approximately 10% growth before adverse currency impacts and the ongoing decline in sales of U.S. HPV test products (-29% / 3% of sales). Sales of consumables used on the QIASymphony automation platform also grew at a solid pace for the full year, as QIAGEN exceeded its goal for new QIASymphony placements.

**Applied Testing** represented approximately 9% of net sales, grew 5% in 2016 compared to 2015 with adverse currency movements resulting in a loss of two percentage points of sales growth. Before negative currency impacts, Applied Testing advanced on high-single digit growth rates for instruments while consumables and related revenues grew at mid-single digit rates.

**Pharma** experienced 5% sales growth in 2016 compared to 2015 with adverse currency movements resulting in a loss of two percentage points of sales growth and provided 19% of net sales. Pharma grew on high-single digit growth rates for consumables and related revenues while instruments maintained a mid-single digit rate during the course of the year before negative currency impacts.

**Academia** represented approximately 22% of net sales and rose 4% in 2016 compared to 2015 with negligible adverse currency movements. Before negative currency impacts, Academia advanced on a mid-single digit growth rate for consumables and related revenues while all regions showed gains in this customer class in 2016.

#### *Gross Profit*

Gross profit was \$834.0 million, or 62% of net sales, in 2016, compared with \$819.3 million, or 64% of net sales, in 2015. Generally, our consumables and related products have a higher gross margin than our instrumentation products and service arrangements. Fluctuations in the sales levels of these products and services can result in fluctuations in gross margin between periods. Gross profit in 2016 was impacted by lower gross margins for companion diagnostic partnerships. Further, gross profit in 2016 was impacted by impairment charges of \$13.0 million recognized in connection with our 2016 restructuring. Additionally, during 2016, we incurred incremental costs in connection with the relocation and centralization of the manufacturing of certain products to our European production site in Hilden, Germany and also in connection with the insourcing of the manufacturing of our QuantiFERON product to our U.S. production site in Germantown, Maryland.

Amortization expense related to developed technology and patent and license rights, which have been acquired in business combinations, is included in cost of sales. The amortization expense on acquisition-related intangibles within cost of sales decreased slightly to \$80.1 million in 2016 from \$84.5 million in 2015. Acquisition-related intangible amortization would increase in the future should we make further acquisitions.

#### *Research and Development*

Research and development expenses increased by 34% to \$170.5 million (13% of net sales) in 2016, compared to \$127.0 million (10% of net sales) in 2015. The increase in 2016 includes \$26.4 million in restructuring costs related to internal restructuring activities, including personnel related and asset impairment costs. During 2015, we introduced our GeneReader NGS System and continue to invest in research and development as we develop a range of upgrades and enhancements to address new applications and market segments. We also plan to introduce additional cancer-related gene panels, with longer-term expansion of the NGS content menu beyond oncology. The increase in research and development costs during 2016 also reflects our ongoing investments in NGS and our life sciences portfolio, as well as our acquisitions of MO BIO in late 2015 and Exiqon in 2016 together with regulatory activity in support of new products. As we continue to discover, develop and acquire new products and technologies, we expect to incur additional expenses related to facilities, licenses and employees engaged in research and development. Additionally, research and development costs are expected to increase as a result of seeking regulatory approvals, including U.S. FDA Pre-Market Approval (PMA), U.S. FDA 510(k) clearance and EU CE approval of certain assays or instruments. Further, business combinations, along with the acquisition of new technologies, may increase our research and development costs in the future. We have a strong commitment to innovation and expect to continue to make investments in our research and development efforts.

#### *Sales and Marketing*

Sales and marketing expenses increased 11% to \$440.4 million (33% of net sales) in 2016 from \$398.5 million (31% of net sales) in 2015. The increase in 2016 includes \$24.9 million in restructuring costs related to internal restructuring activities, including personnel related and advisory costs. Additionally, sales and marketing expenses were higher as a percentage of sales in 2016 as compared to 2015 to support commercialization of growth drivers and geographic expansion. Sales and marketing expenses are primarily associated with personnel, commissions, advertising, trade shows, publications, freight and logistics expenses, and other promotional expenses. During 2016, amortization expense on acquisition-related intangibles within operating expense increased to \$39.1 million, compared to \$38.7 million in 2015. We expect acquisition-related intangible amortization will increase as a result of our future acquisitions. In 2016, we continued investments in our commercialization activities related to our sales force, in particular the addition of sales representatives for QuantiFERON TB and the life sciences markets. We have also continued our e-commerce initiatives as well as investments to expand our presence in markets such as the Middle East and Asia. These incremental investments more than offset favorable currency impacts and lower compensation costs following a reassessment of stock units with performance criteria. We anticipate that absolute sales and marketing costs will increase along with new product introductions and growth in sales of our products, but decrease as a percentage of sales. Further, looking forward we expect a lower cost base following the realignment of marketing activities as part of the restructuring project initiated in the fourth quarter of 2016.

#### *General and Administrative, Integration and Other*

General and administrative, integration and other costs increased by 27% to \$129.2 million (10% of net sales) in 2016 from \$102.1 million (8% of net sales) in 2015. In 2016, acquisition and integration costs totaled \$31.1 million, of which \$6.3 million related to the transaction costs incurred in connection with the acquisition of Exiqon A/S. In 2015, acquisition and integration costs totaled \$13.9 million, of which \$7.5 million related to the transaction costs incurred in connection with the acquisition of MO BIO Laboratories. Acquisition and integration related costs in 2016 are net of \$5.0 million of the total \$6.5 million gains recorded in general and administrative costs from the reduction in the fair value of contingent consideration following unmet milestones. Additionally, the increase in 2016 includes \$4.9 million in restructuring costs related to internal restructuring activities, including severance and retention costs. The increase in general and administrative, integration and other costs also reflects an increase of \$5.1 million related to share-based compensation expense as 2015 includes the impact of lower share based compensation costs following a reassessment of stock units with performance criteria. As we further integrate the acquired companies and pursue other opportunities to gain efficiencies, we expect to continue to incur additional business integration in 2017. Over time, we believe the integration activities will reduce expenses as we improve efficiency in operations.

#### *Financial Income (Expense)*

For the year ended December 31, 2016, financial income increased to \$6.8 million from \$4.8 million in 2015. Financial income includes interest earned on cash, cash equivalents and short term investments, income related to certain interest rate derivatives as discussed in Note 24 in the accompanying consolidated financial statements and other components including the interest portion of operating lease transactions.

Financial expense increased to \$39.0 million in 2016, compared to \$37.4 million in 2015. Financial expense primarily relate to debt, discussed in Note 15 in the accompanying consolidated financial statements.

QIAGEN N.V.'s presentation currency is the U.S. dollar, and most of our subsidiaries' functional currencies are the local currencies of the countries in which they are headquartered. All amounts in the financial statements of entities whose functional currency is not the U.S. dollar are translated into U.S. dollar equivalents at exchange rates as follows: (1) assets and liabilities at period-end rates, (2) income statement accounts at average exchange rates for the period, and (3) components of shareholders' equity at historical rates. Translation gains or losses are recorded in shareholders' equity, and transaction gains and losses are reflected in net income. For the year ended December 31, 2016, we recorded net losses on foreign currency of less than \$0.1 million compared to \$0.5 million in 2015 due to foreign currency rate fluctuations.

Losses from investments in associates in 2016 was \$5.5 million and includes a \$8.3 million loss recognized in connection with the impairment of an equity-method investment as part of the restructuring program initiated late in 2016. During the year ended December 31, 2015, gains from investments in associates was \$0.6 million.

#### *Other Financial Expense, net*

Other financial expense, net was \$19.4 million for the year ended December 31, 2016 and includes a \$2.6 million charge for the disposal of goodwill following the transfer of the research and development activities of our instrumentation business as part of the restructuring program discussed in Note 6. Other financial expense, net was \$8.2 million in 2015 and includes the gains from the redemption of the 2004 Notes as discussed in Note 15.

#### *Provision for Income Taxes*

Our effective tax rates differ from The Netherlands statutory tax rate of 25% due in part to our operating subsidiaries being exposed to effective tax rates ranging from zero to more than 40%. In 2016 and 2015, our effective tax rates were (48.6)% and 10.6%, respectively. The comparison is impacted by pre-tax book income which was lower in 2016 at \$33.1 million compared to \$148.1 million in 2015. Pretax book income was lower in 2016 primarily due to charges incurred in connection with the restructuring program initiated in the fourth quarter of 2016. Fluctuations in the distribution of pre-tax (loss) income among our operating subsidiaries can lead to fluctuations of the effective tax rate in the consolidated financial statements. In 2016 and 2015, tax expense on foreign operations was favorably impacted by lower income tax rates and partial tax exemptions on foreign income primarily derived from operations in Germany, Singapore, Luxembourg, Ireland and Switzerland. These foreign tax benefits are due to a combination of favorable tax laws, regulations, rulings, and exemptions in these jurisdictions. In particular, we have pre-tax income in Germany which is statutorily exempt from trade tax on intercompany foreign royalty income. Further, we have intercompany financing arrangements through Luxembourg and Ireland in which the intercompany income is partially exempt. See Note 16 to the consolidated financial statements for a full reconciliation of the effective tax rate to The Netherlands statutory rate.

In future periods, our effective tax rate may fluctuate from similar or other factors as discussed in "Changes in tax laws or their application could adversely affect our results of operations or financial flexibility" in Principle Risks and Uncertainties.

#### *Liquidity and Capital Resources*

To date, we have funded our business primarily through internally generated funds, debt, and private and public sales of equity. Our primary use of cash has been to support continuing operations and our investing activities including capital expenditure requirements and acquisitions. As of December 31, 2016 and 2015, we had cash and cash equivalents of \$439.2 million and \$290.0 million, respectively. We also had current available-for-sale assets of \$93.0 million at December 31, 2016. Cash and cash equivalents are primarily held in U.S. dollars and euros, other than those cash balances maintained in the local currency of subsidiaries to meet local working capital needs. At December 31, 2016, cash and cash equivalents had increased by \$149.2 million from December 31, 2015, primarily as a result of cash provided by operating activities of \$348.1 million, partially offset by cash used in financing activities of \$11.4 million and cash used in investing activities of \$184.7 million. As of December 31, 2016 and 2015, we had working capital of \$707.6 million and \$648.2 million, respectively.

**Operating Activities.** For the years ended December 31, 2016 and 2015, we generated net cash from operating activities of \$348.1 million and \$341.5 million, respectively. While net income was \$49.3 million in 2016, non-cash components in income included \$222.6 million of depreciation and amortization and \$45.5 million of restructuring related impairment charges incurred in connection with the restructuring program initiated in the fourth quarter of 2016. Operating cash flows include a net increase in working capital of \$0.2 million excluding changes in fair value of derivative instruments. The current period change in working capital is primarily due to increased inventories and accounts receivable, partially offset by increased accrued liabilities and taxes payable. Because we rely heavily on cash generated from operating activities to fund our business, a decrease in demand for our products, longer collection cycles or significant technological advances of competitors would have a negative impact on our liquidity.

**Investing Activities.** Approximately \$184.7 million of cash was used in investing activities during 2016, compared to \$166.1 million during 2015. Investing activities during 2016 consisted principally of \$496.3 million for purchases of short-term investments, \$28.3 million in cash paid for purchases of property and equipment, as well as \$65.6 million paid for intangible assets and \$23.4 million paid for strategic investments in privately and publicly held companies, partially offset by \$533.8 million from the sale of short-term investments. Cash paid for acquisitions, net of cash acquired, of \$90.5 million primarily represents the total cash paid for the acquisition of Exiqon A/S, net of acquired cash.

**Financing Activities.** Approximately \$11.4 million of cash was used in financing activities for the year ended December 31, 2016 compared to \$261.7 million in 2015. Cash used during 2016 consisted primarily of \$6.7 million for the repayment of debt assumed via the acquisition of Exiqon, as well as other financing activities including \$3.1 million paid for contingent consideration and \$5.5 million for the acquisition of the remaining noncontrolling interests of Exiqon. Cash used during 2015, was mainly due to the repayment of the long-term debt of QIAGEN Finance of \$250.9 million as discussed in Note 15. Additionally, cash used during 2015 included \$20.8 million for the purchase of treasury shares which was partially offset by \$10.3 million for the issuance of common shares in connection with our stock plan.

#### ***Other Factors Affecting Liquidity and Capital Resources***

In October 2016, we extended the maturity of our €400 million syndicated revolving credit facility, which now has a contractual lifetime until December 2021 of which no amounts were utilized at December 31, 2016. The facility can be utilized in Euro, British pounds sterling, Swiss franc or U.S. dollar and bears interest of 0.40% to 1.20% above three months EURIBOR, or LIBOR in relation to any loan not in euro, and is offered with interest periods of one, two, three or six months. We have additional credit lines totaling €36.6 million with no expiration date, none of which were utilized as of December 31, 2016. We also have capital lease obligations, including interest, in the aggregate amount of \$2.7 million, and carry \$1.1 billion of long-term debt, of which no amounts are current as of December 31, 2016.

In March 2014, we issued \$730.0 million aggregate principal amount of Cash Convertible Senior Notes of which \$430.0 million is due in 2019 (2019 Notes) and \$300.0 million is due in 2021 (2021 Notes). We refer to the 2019 Notes and the 2021 Notes, collectively as the “Cash Convertible Notes” which are discussed fully in Note 15 to the consolidated financial statements. Interest on the Cash Convertible Notes is payable semiannually in arrears on March 19 and September 19 of each year, at rates of 0.375% and 0.875% per annum for the 2019 Notes and 2021 Notes, respectively, commencing on September 19, 2014. The 2019 Notes will mature on March 19, 2019 and the 2021 Notes will mature on March 19, 2021, unless repurchased or converted in accordance with their terms prior to such date.

In October 2012, we completed a U.S. private placement through the issuance of new senior unsecured notes at a total amount of \$400 million with a weighted average interest rate of 3.66% (settled on October 16, 2012). The notes were issued in three series: (1) \$73 million 7-year term due in 2019 (3.19%); (2) \$300 million 10-year term due in 2022 (3.75%); and (3) \$27 million 12-year term due in 2024 (3.90%).

We had notes payable, which were the long-term borrowings of the proceeds from the issuances of \$150.0 million senior unsubordinated convertible notes, with a 1.5% coupon due in 2024 through QIAGEN Finance (2004 Notes). The 2004 Notes were convertible into our common shares at a conversion price of \$12.6449, subject to adjustment. In connection with conversions of \$14.9 million of the 2004 Notes, we previously repaid \$14.5 million of the debt to QIAGEN Finance. During

2015, we paid \$250.9 million for the redemption of the remaining loan and repurchased the warrant agreement with QIAGEN Finance and recognized a loss of \$7.6 million in other expense, net.

In connection with certain acquisitions, we could be required to make additional contingent cash payments totaling up to \$27.6 million based on the achievement of certain revenue and operating results milestones as follows: \$15.5 million in 2017, \$5.1 million in 2019, and \$7.0 million, payable in any 12-month period from now until 2029 based on the accomplishment of certain revenue targets. Of the \$27.6 million total contingent obligation, we have assessed the fair value at December 31, 2016, to be \$8.8 million, of which \$5.8 million is included in other non-current liabilities and \$3.0 million is included in other current liabilities in the accompanying balance sheet as of December 31, 2016.

In 2013, we announced a share buyback program, to purchase up to 100 million of our Common Shares (excluding transaction costs). We completed the share repurchase program in June 2014 having repurchased between September 2013 and June 2014 a total of approximately 4.4 million QIAGEN shares for a total aggregate cost of \$100.4 million (including performance fees).

In July 2014, we announced the launch of our third \$100 million share repurchase program to purchase up to another \$100 million of our common shares (excluding transaction costs). In 2014, 2.1 million QIAGEN shares were repurchased for \$49.1 million (excluding transaction costs) and in 2015 0.8 million QIAGEN shares were repurchased for \$20.8 million. This program expired in December 2015.

In January 2017, we completed a synthetic share repurchase that combined a direct capital repayment with a reverse stock split. The transaction was announced in August 2016 and involved an approach used by various large, multinational Dutch companies to provide returns to shareholders in a faster and more efficient manner than traditional open-market purchases. \$244.0 million was returned to shareholders through the transaction, which reduced the total number of issued common shares by approximately 3.7% to 230.8 million (of which 4.95 million in treasury) as of January 31, 2017. We announced additional share repurchases to take place via the open market during the remainder of 2017, with a view to return an aggregate amount of \$300 million to our shareholders.

Repurchased shares will be held in treasury in order to satisfy various obligations, which include the warrants issued in connection with the issuance of our Cash Convertible Notes and employee share-based remuneration plans.

We expect that cash from financing activities will continue to be impacted by issuances of our common shares in connection with our equity compensation plans and that the market performance of our stock will impact the timing and volume of the issuances. Additionally, we may make future acquisitions or investments requiring cash payments, the issuance of additional equity or debt financing.

We believe that funds from operations, existing cash and cash equivalents, together with the proceeds from our public and private sales of equity, and availability of financing facilities, will be sufficient to fund our planned operations and expansion during the coming year. However, any global economic downturn may have a greater impact on our business than currently expected, and we may experience a decrease in the sales of our products, which could impact our ability to generate cash. If our future cash flows from operations and other capital resources are not adequate to fund our liquidity needs, we may be required to obtain additional debt or equity financing or to reduce or delay our capital expenditures, acquisitions or research and development projects. If we could not obtain financing on a timely basis or at satisfactory terms, or implement timely reductions in our expenditures, our business could be adversely affected.

### **Quantitative and Qualitative Disclosures About Market Risk**

Our market risk relates primarily to interest rate exposures on cash, short-term investments and borrowings and foreign currency exposures. Financial risk is centrally managed and is regulated by internal guidelines which require a continuous internal risk analysis. The overall objective of our risk management is to reduce the potential negative earnings effects from changes in interest and foreign exchange rates. Exposures are managed through operational methods and financial instruments relating to interest rate and foreign exchange risks. In the ordinary course of business, we use derivative instruments, including swaps, forwards and/or options, to manage potential losses from foreign currency exposures and interest rates. The principal objective of such derivative instruments is to minimize the risks and/or costs associated with global financial and operating activities. We do not utilize derivative or other financial instruments for trading or other speculative purposes. All derivatives are recognized as either assets or liabilities in the balance sheet and are measured at fair value with any change in fair value recognized in earnings in the period of change, unless the derivative qualifies as an effective hedge that offsets certain exposures. In determining fair value, we consider both the counterparty credit risk and our own creditworthiness, to the extent that the derivatives are not covered by collateral agreements with the respective counterparties.

**Foreign Currency Derivatives.** As a globally active enterprise, we are subject to risks associated with fluctuations in foreign currencies in our ordinary operations. This includes foreign currency-denominated receivables, payables, debt, and other balance sheet positions. We manage our balance sheet exposure on a group-wide basis primarily using foreign exchange forward contracts, options and cross-currency swaps.

**Interest Rate Derivatives.** We are using interest rate derivatives to align our portfolio of interest bearing assets and liabilities with our risk management objectives. We have entered into interest rate swaps in which we agreed to exchange, at specified intervals, the difference between fixed and floating interest amounts calculated by reference to an agreed-upon notional principal amount.

Further details of our derivative and hedging activities can be found in Note 24 to the accompanying consolidated financial statements.

### **Interest Rate Risk**

At December 31, 2016, we had \$439.2 million in cash and cash equivalents as well as \$93.0 million in available-for-sale financial assets. Interest income earned on our cash investments is affected by changes in the relative levels of market interest rates. We only invest in high-grade investment instruments. A hypothetical adverse 10% movement in market interest rates would not have materially impacted our financial statements.

Borrowings against lines of credit are at variable interest rates. We had no amounts outstanding against our lines of credit at December 31, 2016. A hypothetical adverse 10% movement in market interest rates would not have materially impacted our financial statements.

At December 31, 2016, we had \$1.1 billion of financial debt, none of which is at a variable rate. Through the use of interest rate derivatives we have swapped \$200 million of our fixed rate debt into a variable interest rate based on the 3-months LIBOR. A hypothetical adverse 10% movement in market interest rates would not have materially impacted our financial statements, as the increased interest expense would have been off-set by increased interest income from our variable rate financial assets.

### **Foreign Currency Exchange Rate Risk**

As a global enterprise, we are subject to risks associated with fluctuations in foreign currencies with regard to our ordinary operations. This includes foreign currency-denominated receivables, payables, debt, and other balance sheet positions as well as future cash flows resulting from anticipated transactions including intra-group transactions.

A significant portion of our revenues and expenses are earned and incurred in currencies other than the U.S. dollar. The euro is the most significant such currency, with others including the British pound, Japanese yen, Chinese renminbi, Swiss franc, and Canadian and Australian dollars. Fluctuations in the value of the currencies in which we conduct our business relative to the U.S. dollar have caused and will continue to cause U.S. dollar translations of such currencies to vary from one period to another. Due to the number of currencies involved, the constantly changing currency exposures, and the potential substantial volatility of currency exchange rates, we cannot predict the effect of exchange rate fluctuations upon future operating results. In general terms, depreciation of the U.S. dollar against our other foreign currencies will increase reported net sales. However, this effect is, at least partially, offset by the fact that we also incur substantial expenses in foreign currencies.

We have significant production and manufacturing facilities located in Germany and intercompany sales of inventory also expose us to foreign currency exchange rate risk. Intercompany sales of inventory are generally denominated in the local currency of the subsidiary purchasing the inventory in order to centralize foreign currency risk with the manufacturing subsidiary. We use an in-house bank approach to net and settle intercompany payables and receivables as well as intercompany foreign exchanged swaps and forward contracts in order to centralize the foreign exchange rate risk to the extent possible. We have entered in the past and may enter in the future into foreign exchange derivatives including forwards, swaps and options to manage the remaining foreign exchange exposure.

### **Employees**

As of December 31, 2016, we employed 4,684 individuals, of which 21% worked in research and development, 41% in sales, 21% in production/logistics, 7% in marketing and 10% in administration

| <b>Region</b>                | <b>Research &amp; Development</b> | <b>Sales</b> | <b>Production</b> | <b>Marketing</b> | <b>Administration</b> | <b>Total</b> |
|------------------------------|-----------------------------------|--------------|-------------------|------------------|-----------------------|--------------|
| Americas                     | 197                               | 634          | 261               | 75               | 93                    | 1,260        |
| Europe                       | 753                               | 694          | 622               | 158              | 316                   | 2,543        |
| Asia Pacific & Rest of World | 45                                | 581          | 113               | 75               | 67                    | 881          |
| <b>December 31, 2016</b>     | <b>995</b>                        | <b>1,909</b> | <b>996</b>        | <b>308</b>       | <b>476</b>            | <b>4,684</b> |

At December 31, 2015 we employed 4,559 individuals. Management believes that its relations with regional labor unions and employees are good.

Our success depends, to a significant extent, on key members of our management and our scientific staff. The loss of such employees could have a material adverse effect on QIAGEN. Our ability to recruit and retain qualified skilled personnel to perform future research and development work will also be critical to our success. Due to the intense competition for experienced scientists from numerous Pharmaceutical and biotechnology companies and academic and other research institutions, there can be no assurance that we will be able to attract and retain such personnel on acceptable terms. Our planned activities will also require additional personnel, including management, with expertise in areas such as manufacturing and marketing, and the development of such expertise by existing management personnel. The inability to acquire such personnel or develop such expertise could have a material adverse impact on our operations.

### **Workforce Diversity**

We have a long-standing commitment to developing a diverse leadership team, including the Managing Board and the Supervisory Board, with a broad range of experience, skills and capabilities. In nominating candidates for these boards, we support the trend toward higher participation of women. We are committed to expanding diversity while pursuing individuals for these boards with a unique blend of scientific and commercial expertise and experience that will contribute to the future success of its business. Internally, management development programs support the career advancement of leaders regardless of gender and other factors. As a result, a number of women are in key leadership roles, particularly in commercial and operational positions around the world. In line with this long-standing commitment, the Supervisory Board will take this into account in the future when proposing members for election or re-election to its Board without compromising QIAGEN's commitment to hiring the best individuals for positions without any discrimination. Our current governance structure has led to a reduction in the size of the Managing Board to two members, so achieving a diversity goal as measured solely by a percentage of overall membership is difficult to achieve. At the same time, QIAGEN has significantly increased the diversity of its senior leadership team and will continue to do so in the future.

### **Compensation of Managing Board Members and Supervisory Directors**

#### *Remuneration policy*

The objective of our remuneration policy is to attract and retain the talented, highly qualified international leaders and skilled individuals, who enable QIAGEN to achieve its short and long-term strategic initiatives and operational excellence. Our remuneration policy aligns remuneration with individual performance, corporate performance and fosters sustainable growth and long-term value creation in the context of QIAGEN's social responsibility and stakeholders' interest.

The remuneration policy and overall remuneration levels are benchmarked regularly, against a selected group of companies and key markets in which QIAGEN operates, to ensure overall competitiveness. QIAGEN participates in various compensation benchmarking surveys that provide information on the level, as well as the structure, of compensation awarded by various companies and industries for a broad range of positions around the world. The companies in the peer group are selected on the basis of market capitalization, competitors for talent, similar complexity and international spread, operating in similar industries.

The performance of the Managing Board members is measured annually against a written set of goals. The remuneration of the Managing Board members is linked to the achievement of QIAGEN's strategic and financial goals. To ensure that remuneration is linked to performance, a significant proportion of the remuneration package is variable and contingent on performance of the individual and the company. These goals are set at ambitious levels each year to motivate and drive performance, with a focus on achieving both long-term strategic initiatives and short-term objectives based on the annual operative planning. Performance metrics used for these goals include the achievement of financial and non-financial targets.

The remuneration package of the Managing Board members consists of a combination of base salary, short term variable cash award and several elements of long term incentives (together, 'total direct compensation'). In addition, the members of the Managing Board receive a pension arrangement and other benefits that are standard in our industry, such as a company car.

The total target remuneration package of the Managing Board members is appropriately set against a variety of factors which includes external and internal equity, experience, complexity of the position, scope and responsibilities. We aim to provide the members of the Managing Board a total direct compensation at market median level.

The structure of the remuneration package for the Managing Board is designed to balance short-term operational excellence with long-term sustainable value creation while taking into account the interests of its stakeholders. As such a significant part of the total remuneration of the Managing Board members consist of variable remuneration which can differ substantially from year to year depending on our corporate results and individual performance and may include equity-based compensation which may be subject to vesting conditions over a period of up to 10 years.

Reference is made to the additional disclosures in the Corporate Governance Report.

## ***Risk Management***

Our risk management approach embodies the key elements of a sound risk management system including (1) active Supervisory Board and senior management involvement; (2) adequate policies and procedures; (3) adequate risk management, monitoring and information systems; and (4) comprehensive internal controls.

QIAGEN is managed by a Managing Board and an independent Supervisory Board appointed by the General Meeting of Shareholders. One of the Managing Board's responsibilities is the oversight of the risk management system. The Managing Board has developed and implemented strategies, controls and mitigation measures to identify current and developing risks as part of the risk management system. Risk management policies and procedures are embodied in our corporate governance, code of ethics and financial reporting controls and procedures. A variety of functional experts evaluate these business risks, attempting to mitigate and manage these risks on an ongoing basis.

Identified risks are subdivided into three types:

- A base business risk is specific to us or our industry and that threatens our current and existing business;
- A business growth risk is specific to us or our industry that threatens our future business growth; and
- An underlying business risk is not specific to us or our industry, but applies to a larger number of public companies.

All identified risks are evaluated based on their likelihood of occurring and their potential impact (estimated in monetary terms) in disrupting our progress in achieving our business objectives. The overall risk management goal is to identify risks that could significantly threaten our success and to allow management on a timely basis the opportunity to successfully implement mitigation actions. The results of the risk assessment, and any updates, are reported to the Audit Committee of the Supervisory Board on a regular basis. A detailed risk reporting update is provided each quarter to the Audit Committee for specific risks that have been newly identified or have changed since the previous assessment. A detailed review of all underlying business risks is completed every year. At least once on an annual basis, the Supervisory Board discusses the corporate strategy and business risks as well as the results of an assessment by the Managing Board and the Audit Committee of the structure and operations of the internal risk management and control systems, including any significant changes.

Our corporate governance structure is based on a strong framework that outlines the responsibilities of our Managing and Supervisory Boards (discussed in more detail in the Corporate Governance Report) and the function of the Audit Committee of the Supervisory Board (discussed in more detail in the Corporate Governance Report). We maintain adequate internal controls over financial reporting based on the Internal Control-Integrated Framework (2013) established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to ensure the integrity of financial reporting. Additionally, we have a Compliance Committee that consists of senior executives from various functional areas who are responsible for ensuring compliance with legal and regulatory requirements, as well as overseeing the communication of corporate policies, including our Code of Ethics.

| Risk Types                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Base Business Risk</b>       | <ul style="list-style-type: none"> <li>• Identification and monitoring of competitive business threats</li> <li>• Monitoring complexity of product portfolio</li> <li>• Monitoring dependence on key customers for single product groups</li> <li>• Reviewing dependence on individual production sites or suppliers</li> <li>• Evaluating purchasing initiatives, price controls and changes to reimbursements</li> <li>• Monitoring production risks, including contamination prevention, high-quality product assurance</li> <li>• Ensuring ability to defend against intellectual property infringements and maintain competitive advantage after expiration</li> </ul> |
| <b>Business Growth Risk</b>     | <ul style="list-style-type: none"> <li>• Managing development and success of key R&amp;D projects</li> <li>• Managing successful integration of acquisitions to achieve anticipated benefits</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Underlying Business Risk</b> | <ul style="list-style-type: none"> <li>• Evaluating financial risks, including economic risks and currency rate fluctuations</li> <li>• Monitoring financial reporting risks, including multi-jurisdiction tax compliance</li> <li>• Reviewing possible asset impairment events</li> <li>• Assessing compliance and legal risks, including safety in operations and environmental hazard risks, compliance with various regulatory bodies and pending product approvals</li> <li>• Monitoring risks of FCPA (Foreign Corrupt Practices Act) or antitrust concerns arising from a network of subsidiaries and distributors in foreign countries</li> </ul>                   |

The risks described below are listed in the order of our current view of their expected significance. Describing the risk factors in order of significance does not imply that a lower listed risk factor may not have a material adverse impact on our results of operations, liquidity or capital resources.

**An inability to manage our growth, manage the expansion of our operations, or successfully integrate acquired businesses could adversely affect our business.**

Our business has grown, with total net sales increasing to \$1.34 billion in 2016 from \$1.25 billion in 2012. We have made a series of acquisitions in recent years, including the acquisitions of Exiqon A/S in 2016, MO BIO Laboratories in 2015, Enzymatics and BIOBASE in 2014, Ingenuity and CLC bio in 2013, and Intelligent BioSystems and AmniSure in 2012. We intend to identify and acquire other businesses in the future that support our strategy to build on our global leadership position in Sample to Insight solutions. The successful integration of acquired businesses requires a significant effort and expense across all operational areas.

We have also made significant investments to expand our business operations. We completed an expansion project in Germany in early 2012 and another at our facility in Germantown, Maryland, for research, production and administrative space in 2013. We completed two smaller-scale building projects in 2015. These expansion projects have increased our fixed costs, resulting in higher operational costs in the short term that will negatively impact our gross profit and operating income until we more fully utilize the additional capacity of these planned facilities. In 2012, we added a subsidiary in Poland as part of the creation of a new global shared services center to gain economies of scale in various administrative functions, and since that time have expanded the shared service center to include more than 150 employees. The expansion of our business and the addition of new personnel may place a strain on our management and operational systems. As we continue to upgrade our operating and financial systems and expand the geographic presence of our operations, we intend to continue to assess the need for reallocation of existing resources or the hiring of new employees as well as increased responsibilities for both existing and new management personnel.

Our future operating results will depend on the ability of our management to continue to implement and improve our research, product development, manufacturing, sales and marketing and customer support programs, enhance our operational and financial control systems, expand, train and manage our employee base, integrate acquired businesses, and effectively address new issues related to our growth as they arise. There can be no assurance that we will be able to manage our recent or any future expansion or acquisitions successfully, and any inability to do so could have a material adverse effect on our results of operations.

**Our acquisitions expose us to new risks, and we may not achieve the anticipated benefits of acquisitions of technologies and businesses.**

During the past several years, we have acquired and integrated a number of companies through which we have gained access to new technologies, products and businesses that complement our internally developed product lines. In the future, we expect to

acquire additional technologies, products or businesses to expand our operations. Acquisitions expose us to new operating and other risks, including risks associated with the:

- assimilation of new products, technologies, operations, sites and personnel;
- integration and retention of fundamental personnel and technical expertise;
- application for and achievement of regulatory approvals or other clearances;
- diversion of resources from our existing products, business and technologies;
- generation of sales to offset associated acquisition costs;
- implementation and maintenance of uniform standards and effective controls and procedures;
- maintenance of relationships with employees and customers and integration of new management personnel;
- issuance of dilutive equity securities;
- incurrence or assumption of debt and contingent liabilities;
- amortization or impairment of acquired intangible assets or potential businesses; and
- exposure to liabilities of and claims against acquired entities.

Our failure to address the above risks successfully in the future may prevent us from achieving the anticipated benefits from any acquisition in a reasonable time frame, or at all.

**Our continued growth is dependent on the development and success of new products.**

Rapid technological change and frequent new product introductions are typical in the markets we serve. Our success will depend in part on continuous, timely development and introduction of new products that address evolving market requirements. We believe successful new product introductions provide a significant competitive advantage because customers make an investment of time in selecting and learning to use a new product and are reluctant to switch thereafter. To the extent that we fail to introduce new and innovative products, or such products suffer significant delays in development or are not accepted in the market, we may lose market share to our competitors, which will be difficult or impossible to regain. An inability to successfully develop and introduce new products, for technological or other reasons, could reduce our growth rate or otherwise have an adverse effect on our business. In the past, we have experienced delays in the development and introduction of products, including regulatory approvals, and we may experience delays in the future.

As a result, we cannot assure you that we will keep pace with the rapid rate of change in our markets or that our new products will adequately meet the requirements of the marketplace, achieve market acceptance or regulatory approval or compete successfully with competitive technologies. Some of the factors affecting market acceptance of new products include:

- availability, quality and price relative to competitive products;
- the timing of introduction of the new product relative to competitive products;
- opinions of the new product's utility;
- citation of the new product in published research;
- regulatory trends and approvals; and
- general trends in life sciences research, applied markets and molecular diagnostics.

In the development of new products we may make significant investments in intellectual property and software. These investments increase our fixed costs, resulting in higher operational costs in the short term that will negatively impact our gross profit and operating income until products reach a minimum level of market acceptance. The expenses or losses associated with unsuccessful product development activities or lack of market acceptance of our new products could materially adversely affect our business, financial condition and results of operations.

Important new product programs underway include our modular medium-throughput QIASymphony automation platform, our new GeneReader NGS System for next-generation sequencing (NGS), sample and assay technologies designed either for QIAGEN instruments or for "universal" use on other platforms, and bioinformatics solutions to analyze and interpret genomic data.

The speed and level of adoption of our QIASymphony and GeneReader NGS platforms will affect sales not only of instrumentation but also of consumables, sample and assay kits, designed to run on the systems. The rollouts of QIASymphony and GeneReader NGS System are intended to drive the dissemination and increasing sales of consumables for these systems. We are developing or co-developing new kits for each of these platforms and seeking regulatory approvals for a number of these new products. In turn, the availability and regulatory approval of more tests to run on QIASymphony or GeneReader NGS System, especially molecular assays for specific diseases or companion diagnostics paired with new drugs, will influence the value of the instruments to prospective buyers. Slower adoption of QIASymphony, including the complete QIASymphony RGQ system, or the GeneReader NGS System could significantly affect sales of products designed to run on these platforms.

Our strategic initiative in NGS, including rollout of the GeneReader NGS System and related consumables, aims to drive the adoption of this technology in clinical research and diagnostics. This involves development and commercialization of universal pre-analytic and bioinformatics products for NGS, as well as commercialization of our proprietary GeneReader NGS workflow and related consumables. The market for next-generation sequencing instruments is very competitive, and the speed and level of adoption of our universal solutions and the GeneReader workflow will affect sales of our Sample to Insight solutions.

**Global economic conditions could adversely affect our business, results of operations and financial condition.**

Our results of operations could be materially affected by adverse general conditions in the global economy and financial markets. In times of economic hardship or high unemployment, patients may decide to forgo or delay routine tests, in particular our HPV test used to screen women for risk of cervical cancer. Changes in the availability or reimbursement of our diagnostic testing products by insurance providers and healthcare maintenance organizations could also have a significant adverse impact on our results of operations.

Access to financing in the global financial markets has also been adversely affected for many businesses during the recent challenging economic times and public debt crisis. The uncertainty surrounding the resolution of the economic and sovereign debt crisis in Europe continues to have a negative impact on financial markets and economic conditions more generally. Our customers may face internal financing pressures that adversely impact spending decisions, the ability to purchase our products or that lead to a delay in collection of receivables and thus negatively impact our cash flow. A severe or prolonged economic downturn could result in a variety of risks to our business that would adversely impact our results of operations, including the reduction or delay in planned improvements to healthcare systems in various countries, the reduction of funding for life sciences research, and intensified efforts by governments and healthcare payors regarding cost-containment efforts.

Our results of operations could also be negatively impacted by any governmental actions or inaction resulting in automatic government spending cuts (sequestration) that may take effect (as in the U.S. in 2013). These conditions may add uncertainty to the timing and budget for investment decisions by our customers, particularly, researchers, universities, government laboratories and private foundations whose funding is dependent upon grants from government agencies, such as the U.S. National Institutes of Health (NIH) and similar bodies.

As is the case for many businesses, we face the following risks in regard to financial markets:

- severely limited access to financing over an extended period of time, which may affect our ability to fund our growth strategy and could result in delays to capital expenditures, acquisitions or research and development projects;
- failures of currently solvent financial institutions, which may cause losses from our short-term cash investments or our hedging transactions due to a counterparty's inability to fulfill its payment obligations;
- inability to refinance existing debt at competitive rates, reasonable terms or sufficient amounts; and
- increased volatility or adverse movements in foreign currency exchange rates.

**We may encounter delays in receipt, or limits in the amount, of reimbursement approvals and public health funding, which will impact our ability to grow revenues in the healthcare market or may negatively impact our profitability.**

Third-party payors are often reluctant to reimburse healthcare providers for the use of medical tests that involve new technologies or provide novel diagnostic information. In addition, third-party payors are increasingly limiting reimbursement coverage for medical diagnostic products and, in many instances, are exerting pressure on diagnostic product suppliers to reduce their prices. Since each third-party payor often makes reimbursement decisions on an individual patient basis, obtaining such approvals is a time-consuming and costly process that requires us to provide scientific and clinical data supporting the clinical benefits of each of our products. As a result, there can be no assurance that reimbursement approvals will be obtained. This process can delay the broad market introduction of new products, and could have a negative effect on our results of operations. As a result, third-party reimbursement may not be consistent or financially adequate to cover the cost of our products. This could limit our ability to sell our products or cause us to reduce prices, which would adversely affect our results of operations.

Further, the ability of many of our customers to successfully market their products depends in part on the extent to which reimbursement for the costs of these products is available from governmental health administrations, private health insurers and other organizations. Governmental and other third-party payors are increasingly seeking to contain healthcare costs and to reduce the price of medical products and services. For example, in 2010, the Patient Protection and Affordable Care Act, or ACA, was enacted with the goal of expanding coverage, increasing quality of care and reducing costs through payment innovation, among other things. Although President Trump and many in Congress have expressed an intention to repeal or repeal and replace the ACA, the Centers for Medicare and Medicaid Services had already made changes to payment models and it is not possible to predict what if any changes will result from any repeal or replacement of the ACA. The uncertainty around the future of the ACA, and in particular the impact to reimbursement levels, may lead to uncertainty or delay in the purchasing

decisions of our customers, which may in turn negatively impact our product sales. If there are not adequate reimbursement levels, our business and results of operations could be adversely affected.

**Reduction in research and development budgets and government funding may result in reduced sales.**

Our customers include researchers at pharmaceutical and biotechnology companies, academic institutions, and government and private laboratories. Fluctuations in the research and development budgets of these organizations could have a significant adverse effect on demand for our products. Research and development budgets are affected by changes in available resources, the mergers of pharmaceutical and biotechnology companies, changes in spending priorities and institutional budgetary policies. Our results of operations could be adversely affected by any significant decrease in expenditures for life sciences research and development by pharmaceutical and biotechnology companies, academic institutions, and government and private laboratories. In addition, short-term changes in administrative, regulatory or purchasing-related procedures can create uncertainties or other impediments that can have an adverse impact on our results of operations.

In recent years, the pharmaceutical and biotechnology industries have undergone substantial restructuring and consolidation. Additional mergers or consolidation within the pharmaceutical and biotechnology industries could cause us to lose existing customers and potential future customers, which could have a material adverse impact on our results of operations.

Approximately 22% of our sales are generated from demand for our products used in the Academia customer class by researchers at universities, government laboratories and private foundations, and whose funding is dependent upon grants from government agencies, such as the NIH. Although the level of research funding has been increasing in recent years, we cannot assure you that this trend will continue given federal and state budget constraints. Government funding of research and development is subject to the political process, which is inherently unpredictable. Future sales may be adversely affected if our customers delay purchases as a result of uncertainties regarding the approval of government or industrial budget proposals. Also, government proposals to reduce or eliminate budgetary deficits have sometimes included reduced allocations to the NIH and government agencies in other countries that fund life sciences research and development activities. A reduction in government funding for the NIH or government research agencies in other countries could have a serious adverse impact on our results of operations.

**Competition could reduce our sales.**

We face various competitive factors against greater adoption of our products, in particular the use of laboratory-developed tests (LDTs), where widely available reagents and other chemicals are used in a non-standardized manner to perform sample and assay processing. While the use LDTs will be limited due to the fact that they are not FDA or similarly approved, the success of our business depends in part on the continued conversion of current users of LDTs to our standardized sample and assay technologies and other products. There can be no assurance, however, as to the continued conversion of these potential customers. We are also aware that a significant number of laboratory organizations and competitors are developing and using their own internally developed molecular tests. Some competitor companies may seek regulatory approvals from the U.S. Food and Drug Administration (FDA) or similar non-U.S. regulatory authorities and bring to the market alternative products that could limit the use of our products.

We have experienced, and expect to continue to experience, increasing competition from companies that provide competitive pre-analytical solutions and also other products used by our customers. The markets for some of our products are very competitive and price sensitive. Other product suppliers may have significant advantages in terms of financial, operational, sales and marketing resources as well as experience in research and development. These companies may have developed, or could develop in the future, new technologies that compete with our products or even render our products obsolete. The development of products offering superior technology or a more cost-effective alternative to our products could have a material adverse effect on our results of operations.

We believe that customers in the market for pre-analytical sample technologies as well as for assay technologies display significant loyalty to their initial supplier of a particular product, in particular given the time and expense required by customers to properly integrate these products into their operations. As a result, it may be difficult to convert customers who have purchased products from competitors, and our competitive position may suffer if we are unable to be the first to develop and supply new products.

**The time and expense needed to obtain regulatory approval and respond to changes in regulatory requirements could adversely affect our ability to commercially distribute our products and generate sales.**

We and our customers operate in a highly regulated environment characterized by continuous changes in the governing regulatory framework, particularly for product approvals. Genetic research activities and products commonly referred to as “genetically engineered” (such as certain food and therapeutic products) are subject to extensive governmental regulation in most developed countries, especially in the major markets for pharmaceutical and diagnostic products such as the European Union, the U.S. and Japan. In recent years, several highly publicized scientific events (most notably in genomic research and

“cloning”) have prompted intense public debates on the ethical, philosophical and religious implications of an unlimited expansion in genetic research and the use of products emerging from this research. As a result of this debate, some key countries may increase existing regulatory barriers, which could adversely affect demand for our products and prevent us from fulfilling our growth expectations. Furthermore, there can be no assurance that any future changes of applicable regulations will not require further expenditures or an alteration, suspension or liquidation of our operations in certain areas, or even in their entirety.

Changes in the existing regulations or adoption of new requirements or policies could adversely affect our ability to sell our approved or cleared products or to seek approvals for new products in other countries around the world. Sales of certain products now in development may be dependent upon us successfully conducting pre-clinical studies, clinical trials and other tasks required to gain regulatory approvals. These trials could be subject to extensive regulation by governmental authorities in the U.S., particularly the FDA, and regulatory agencies in other countries. These trials involve substantial uncertainties and could impact customer demand for our products.

In addition, certain products, especially those intended for use in *in vitro* diagnostic applications, require regulatory approvals in various countries. For example, since the European Union Directive 98/79/EC on *in vitro* diagnostic medical devices (EU-IVD-D) went into effect in 2003, all products and kits used for *in vitro* diagnostic applications must be compliant with this directive. In addition to high-risk products such as HIV testing systems (list A of Annex II of the directive) or blood glucose testing systems (list B of Annex II of the directive), nucleic acid purification products, which are used in diagnostic workflows, are affected by this regulatory framework. The major goals of this directive are to standardize diagnostic procedures within the European Union, to increase reliability of diagnostic analysis and to enhance patient safety. In addition, new Medical Device Regulations and *In Vitro* Diagnostic Regulations, part of which may go into effect as early as 2018, will make major changes in the CE marking certification and compliance requirements for all medical devices and *in vitro* diagnostics. If we fail to obtain any required clearances, approvals, or certifications, it could significantly damage our business in these markets.

Several of our key products and programs are medical devices that are subject to extensive regulation by the FDA under the U.S. Food, Drug and Cosmetic Act. We plan to apply for FDA clearance or approval of additional products in the future. Regulatory agencies in other countries also have medical device and IVD approval regulations that are becoming more extensive. These regulations govern most commercial activities associated with medical devices, including indications for the use of these products as well as other aspects that include product development, testing, manufacturing, labeling, storage, record-keeping, advertising and promotion. Compliance with these regulations is expensive and time-consuming.

Each medical device that we wish to distribute commercially in the U.S. will likely require us to seek either 510(k) clearance or approval of a pre-market approval application (PMA) from the FDA prior to marketing the device for *in-vitro* diagnostic use. Clinical trials related to our regulatory submissions may take years to complete and represent a significant expense. The 510(k) clearance pathway usually takes from three to 12 months, but can take longer. The PMA pathway is more costly, lengthy and uncertain, and can take from one to three years, or longer. For example, it took more than four years to receive pre-market approval from the FDA for our HPV test product for use as a test for the presence of HPV in women with equivocal Pap test results and pre-market approval for the use of our HPV test as a primary adjunctive cervical cancer screening test to be performed in combination with the Pap test for women age 30 and older. The uncertain time period required for regulatory review increases our costs to develop new products and increases the risk that we will not succeed in introducing or selling new products in the U.S.

Our cleared or approved devices, including our diagnostic tests and related equipment, are subject to numerous post-approval requirements. We are subject to inspection and marketing surveillance by the FDA to determine our compliance with regulatory requirements. If the FDA determines that we have failed to comply, it can institute a wide variety of enforcement actions, ranging from warning letters to more severe sanctions such as fines, injunctions and civil penalties, recalls or seizures of our products, operating restrictions, partial suspension or total shutdown of production, denial of our requests for 510(k) clearance or pre-market approval of product candidates, withdrawal of 510(k) clearance or pre-market approval already granted and civil or criminal prosecution. Any enforcement action by the FDA may affect our ability to commercially distribute these products in the U.S.

Some of our products are sold for research purposes in the U.S. We do not promote these products for clinical diagnostic use, and they are labeled “For Research Use Only” (RUO) or “for molecular biology applications.” If the FDA were to disagree with our designation of a product, we could be forced to stop selling the product until appropriate regulatory clearance or approval has been obtained. Further, some of our products are used in LDTs, where laboratories use our materials for assays manufactured, validated and performed in house. We do not promote these products for clinical diagnostic use.

Further, the FDA has publicly announced its intention to regulate certain LDTs in a phased-in approach, but draft guidance that was published a couple of years ago was withdrawn at the end of the Obama administration and replaced by an informal nonenforceable discussion paper reflecting some of the feedback that it received on LDT regulation. LDTs represent the majority of molecular tests currently in use in terms of volume, and our automation systems - particularly the QIASymphony

platform - are designed to accommodate the automation and validation of these tests. On the other hand, laboratories creating LDTs may use some of our materials in their tests. We do not promote these products for clinical diagnostic use, but if the FDA were to stop the use of LDTs or significantly limit their area of application, sales of some of our products in the U.S. could be adversely affected. The flexibility to handle LDTs is an advantage for our instruments, particularly the QIA Symphony automation system. On the consumables side, however, LDTs can at times create competition to our own commercially approved tests. We are pursuing a strategy of developing new content for our platforms partly by seeking regulatory approvals for new assays that incorporate approvals for these tests to run on QIAGEN instruments. We believe standardized tests that pass regulatory scrutiny and are clinically validated are highly attractive to reference laboratories and healthcare providers in our Molecular Diagnostics customer class, and also to customers in Pharma and Academia who rely on molecular assays to research and develop new products. At this point, the ultimate impact of potential new FDA policies on LDTs is uncertain.

**Exchange rate fluctuations may adversely affect our business and operating results.**

Because we currently market our products throughout the world, a significant portion of our business is conducted in currencies other than the U.S. dollar, our reporting currency. As a result, fluctuations in value, relative to the U.S. dollar, of the currencies in which we conduct our business have caused and will continue to cause foreign currency transaction gains and losses. Foreign currency transaction gains and losses arising from normal business operations are charged against earnings in the period when incurred. Due to the number of currencies involved, the variability of currency exposures and the potential volatility of currency exchange rates, we cannot predict the effects of future exchange rate fluctuations. While we may engage in foreign exchange hedging transactions to manage our foreign currency exposure, there can be no assurance that our hedging strategy will adequately protect our operating results from the effects of future exchange rate fluctuations.

**Changes in tax laws or their application or the termination or reduction of certain government incentives, could adversely impact our overall effective tax rate, results of operations or financial flexibility.**

Our effective tax rate reflects the benefit of some income being partially exempt from income taxes due to various intercompany operating and financing activities. The benefit also derives from our global operations where certain income or loss is taxed at rates higher or lower than The Netherlands' statutory rate of 25%. Changes in tax laws or their application with respect to matters such as changes in tax rates, transfer pricing and income allocation, utilization of tax loss carry forwards, intercompany dividends, controlled corporations, and limitations on tax relief allowed on the interest on intercompany debt, and changes to tax credit mechanisms, could increase our effective tax rate and adversely affect our results of operations and limit our ability to repurchase our Common Shares without experiencing adverse tax consequences. Additionally, changes in other laws may subject us to additional excise taxes. Current tax proposals within the U.S. House of Representatives (the "Blueprint"), which include provisions for a border adjustment tax and disallowance of interest expense (among others), could have materially adverse tax consequences. In addition, the U.S. White House is yet to provide its comprehensive tax plan outline, which may or may not be consistent with the Blueprint, thereby raising even more uncertainty in terms of final law and timeline. The increased tax burden as a result of changes in law may adversely affect our results of operations. Additionally, if our tax positions are challenged by tax authorities or other governmental bodies, such as the European Commission, we could incur additional tax liabilities, which could have an adverse effect on our results of operations or financial flexibility.

**We rely on collaborative commercial relationships to develop some of our products.**

Our long-term business strategy involves entering into strategic alliances as well as marketing and distribution arrangements with academic, corporate and other partners relating to the development, commercialization, marketing and distribution of certain of our existing and potential products. We may be unable to continue to negotiate these collaborative arrangements on acceptable terms, and these relationships also may not be scientifically or commercially successful. In addition, we may be unable to maintain these relationships, and our collaborative partners may pursue or develop competing products or technologies, either on their own or in collaboration with others.

For example, our Personalized Healthcare business includes projects with pharmaceutical and biotechnology companies to co-develop companion diagnostics paired with drugs that those companies either market currently or are developing for future use. The success of these co-development programs, including regulatory approvals for the companion diagnostics, depends upon the continued commitment of our partners to the development of those drugs, the outcome of clinical trials for the drugs and diagnostics, and regulatory approvals of the paired diagnostic tests and drugs. In addition, the future level of sales for companion diagnostics that we bring to market depends to a high degree on the commercial success of the related medicines for which the tests have been designed to be used for determining their use in patients. More companion diagnostics would be sold in combination with a widely prescribed drug than a drug with limited use. Hence, the future success of these diagnostics depends on our Pharma partners' commercialization actions and success.

**Some of our customers are requiring us to change our sales arrangements to lower their costs, and this may limit our pricing flexibility and harm our business.**

Some of our customers have developed purchasing initiatives to reduce the number of vendors from which they purchase products to lower their supply costs. In some cases, these customers have established agreements with large distributors, which include discounts and direct involvement in the distributor's purchasing process. These activities may force us to supply large distributors with our products at discounts in order to continue providing products to some customers. For similar reasons, many larger customers, including the U.S. government, have requested, and may request in the future, special pricing arrangements, which can include blanket purchase agreements. These agreements may limit our pricing flexibility, which could harm our business and affect our results of operations. For a limited number of customers, and at the customer's request, we have conducted sales transactions through third-party online intermediaries to whom we are required to pay commissions. If sales grow through these intermediaries, it could have an adverse impact on our results of operations, particularly a negative impact on our gross profit.

**Our global operations may be affected by actions of governments, global or regional economic developments, weather or transportation delays, natural disasters or other force majeure events (collectively, unforeseen events) which may negatively impact our suppliers, our customers or us.**

Our business involves operations around the world. Our consumable manufacturing facilities are located in Germany, China, the United Kingdom and the U.S. We have established sales subsidiaries in numerous countries and our products are sold through independent distributors serving more than 40 additional countries. Our facilities may be harmed by unforeseen events, and in the event, we or our customers are affected by a disaster, we may experience delays or reductions in sales or production, or increased costs, or may be required to identify alternate suppliers or rely on third-party manufacturers.

To the extent that our suppliers are impacted by a natural disaster or other disruption, we may experience periods of reduced production. Any unexpected interruptions in our production capabilities may lead to delayed or lost sales and may adversely affect our results of operations for the affected period.

In addition, to the extent we temporarily shut down any facility following such an unforeseen event, we may experience disruptions in our ability to ship products to customers or otherwise operate our business. While our global operations give us the ability to ship product from alternative sites, we may not be able to do so because our customers' facilities are shutdown or the local logistics infrastructure is not functioning, and our sales will suffer.

Damage to our property due to unforeseen events and the disruption of our business from casualties may be covered by insurance, but this insurance may not be sufficient to cover all of our potential losses and such insurance may not continue to be available to us on acceptable terms, or at all. In addition, we may incur incremental costs following an unforeseen event which will reduce profits and adversely affect our results of operations.

**We depend on suppliers for materials used to manufacture our products, and if shipments from these suppliers are delayed or interrupted, we may be unable to manufacture our products.**

We buy materials to create our products from a number of suppliers and are not dependent on any one supplier or group of suppliers for our business as a whole. However, key components of certain products, including certain instrumentation and chemicals, are available only from a single source. If supplies from these vendors are delayed or interrupted for any reason, we may not be able to obtain these materials timely or in sufficient quantities or qualities in order to produce certain products, and this could have an adverse impact on our results of operations.

**We heavily rely on air cargo carriers and other overnight logistics services, and shipping delays or interruptions could harm our business.**

Our customers in the scientific research markets typically only keep a modest inventory of our products on hand, and consequently require overnight delivery of purchases. As a result, we heavily rely on air cargo carriers and logistic suppliers. If overnight services are suspended or delayed, and other delivery carriers and logistic suppliers cannot provide satisfactory services, customers may suspend a significant amount of their work. The lack of adequate delivery alternatives would have a serious adverse impact on our results of operations.

**Our success depends on the continued employment of qualified personnel, any of whom we may lose at any time.**

Although we have not experienced any difficulties attracting or retaining management and scientific staff, our ability to recruit and retain qualified, skilled employees will continue to be critical to our success. Given the intense competition for experienced scientists and managers among pharmaceutical and biotechnology companies as well as academic and other research institutions, there can be no assurance that we will be able to attract and retain employees critical to our success on acceptable terms. Initiatives to expand QIAGEN will also require additional employees, including management with expertise in areas such as manufacturing and marketing, and the development of existing managers to lead a growing organization. The failure to recruit and retain qualified employees, or develop existing employees, could have a material adverse impact on our results of operations.

**Our ability to accurately forecast our results during each quarter may be negatively impacted by the fact that a substantial percentage of our sales may be recorded in the final weeks or days of the quarter.**

The markets we serve are typically characterized by a high percentage of purchase orders being received in the final few weeks or even days of each quarter. Although this varies from quarter to quarter, many customers make a large portion of their purchase decisions late in each quarter, in particular because it is during this period that they receive new information on both their budgets and requirements. Additionally, volatility in the timing of milestones from companion diagnostic partnerships can be difficult to predict. As a result, even late in each quarter, we cannot predict with certainty whether our sales forecasts for the quarter will be achieved.

Historically, we have been able to rely on the overall pattern of customer purchase orders during prior periods to project with reasonable accuracy our anticipated sales for the current or coming quarters. However, if customer purchasing trends during a quarter vary from historical patterns as may occur with changes in market conditions, our quarterly financial results could deviate significantly from our projections. As a result, our sales forecasts for any given quarter may prove not to have been accurate. We also may not have sufficient, timely information to confirm or revise our sales projections for a specific quarter. If we fail to achieve our forecasted sales for a particular quarter, the value of our Common Shares could be adversely affected.

**We are subject to privacy and data security laws and rely on secure communication and information systems which, in the event of a breach or failure, expose us to risks.**

We rely heavily on communications and information systems to conduct our business. In the ordinary course of business, we collect and store sensitive data, including our intellectual property and other proprietary business information and that of our customers, suppliers and business partners, and personally identifiable information of our customers and employees, in our data centers and on our networks. Our operations rely on the secure processing, storage and transmission of confidential and other information on our computer systems and networks. We are transforming to a digital, cloud-leveraging organization, which places our assets, customer data, and personally identifiable data at a higher risk than in previous years. We are making significant investments to ensure our employees are aware of cyber security risks facing our company and how to prevent data breaches. Although we are not aware of the occurrence of any data breaches on our systems, we are continuously modernizing our cyber security tools in an attempt to keep pace with evolving cyber security risks. External phishing emails (occurring outside of our computer services) is a growing threat that our customers are facing. These emails could lead to the disclosing of intellectual property or personally identifiable information, which could lead to financial harm and cause reputational damage. While our cyber security team works diligently with our customers to mitigate these threats by helping to identify and analyze phishing emails, we cannot guarantee that sensitive data will not be lost or stolen.

A breach in cyber security due to unauthorized access to our computer systems or misuse could include the misappropriation of assets or sensitive information, the corruption data or other operational disruption. Failures to our computer systems and networks could be caused by internal or external events, such as incursions by intruders or hackers, computer viruses, failures in hardware or software, or cyber terrorists. If we do experience a breach or failure of our systems, we could experience operational delays resulting from the disruption of systems, loss due to theft or misappropriation of assets or data, or negative impacts from the loss of confidential data or intellectual property. We may face significant liability in the event any of the personal information we maintain is lost or otherwise subject to misuse or other wrongful use, access or disclosure. Further, we could experience negative publicity resulting in reputation or brand damage with customers or partners.

Additionally, we are subject to privacy and data security laws across multiple jurisdictions, including those relating to the storage of health information, which are complex, overlapping and rapidly evolving. As our activities continue to evolve and expand, we may be subject to additional laws which impose further restrictions on the transfer, access, use, and disclosure of health and other personal information which may impact our business either directly or indirectly. Our failure to comply with applicable privacy or security laws or significant changes in these laws could significantly impact our business and future business plans. For example, we may be subject to regulatory action or lawsuits in the event we fail to comply with applicable privacy laws.

**We have a significant amount of debt that may adversely affect our financial condition and flexibility.**

We have a significant amount of debt and debt service obligations as well as restrictive covenants imposed on us by our lenders. A high level of indebtedness increases the risk that we may default on our debt obligations and restrictive covenants may prevent us from borrowing additional funds. There is no assurance that we will be able to generate sufficient cash flow to pay the interest on our debt and comply with our debt covenants or that future working capital, borrowings or equity financing will be available to repay or refinance our debt. If we are unable to generate sufficient cash flow to pay the interest on our debt and comply with our debt covenants, we may have to delay or curtail our research and development programs. The level of our indebtedness could, among other things:

- make it difficult for us to make required payments on our debt;

- make it difficult for us to obtain any financing in the future necessary for working capital, capital expenditures, debt service requirements or other purposes;
- limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we compete; and
- make us more vulnerable in the event of a downturn in our business.

**Our business may require substantial additional capital, which we may not be able to obtain on terms acceptable to us, if at all.**

Our future capital requirements and level of expenses will depend upon numerous factors, including the costs associated with:

- marketing, sales and customer support efforts;
- research and development activities;
- expansion of our facilities;
- consummation of possible future acquisitions of technologies, products or businesses;
- demand for our products and services;
- repayment or refinancing of debt; and
- payments in connection with our hedging activities.

We currently anticipate that our short-term capital requirements will be satisfied by cash flow from our operations. As of December 31, 2016, we had outstanding long-term debt of approximately \$1.1 billion, of which no amount was current. Furthermore, as of December 31, 2016, we had capital lease obligations, including the current portion, of \$2.6 million, that expire in various years through 2020. We may need to refinance all or part of these liabilities before or at their contractual maturities.

If at some point in time our existing resources should be insufficient to fund our activities, we may need to raise funds through public or private debt or equity financings. The funds for the refinancing of existing liabilities or for the ongoing funding of our business may not be available or, if available, not on terms acceptable to us. If adequate funds are not available, we may be required to reduce or delay expenditures for research and development, production, marketing, capital expenditures and/or acquisitions, which could have a material adverse effect on our business and results of operations. To the extent that additional capital is raised through the sale of equity or convertible securities, the issuance of any securities could result in dilution to our shareholders.

**The accounting for the Cash Convertible Notes will result in recognition of interest expense significantly greater than the stated interest rate of the notes and may result in volatility to our Consolidated Statements of Income.**

We will settle any conversions of the Cash Convertible Notes entirely in cash. Accordingly, the conversion option that is part of the Cash Convertible Notes will be accounted for as a derivative pursuant to accounting standards relating to derivative instruments and hedging activities. Refer to Note 24, "Financial Risk Factors and Use of Derivative Financial Instruments" and Note 15 "Financial Debts," of the Notes to Consolidated Financial Statements. In general, this resulted in an initial valuation of the conversion option separate from the debt component of the Cash Convertible Notes, resulting in an original issue discount. The original issue discount will be accreted to interest expense over the term of the Cash Convertible Notes, which will result in an effective interest rate reported in our financial statements significantly in excess of the stated coupon rates of the Cash Convertible Notes. This accounting treatment will reduce our earnings. For each financial statement period after the issuance of the Cash Convertible Notes, a gain (or loss) will be reported in our financial statements to the extent the valuation of the conversion option changes from the previous period. The Call Options will also be accounted for as derivative instruments, substantially offsetting the gain (or loss) associated with changes to the valuation of the conversion option. This may result in increased volatility to our results of operations.

**The cash convertible note hedge and warrant transactions we entered into in connection with the issuance of our Cash Convertible Notes may not provide the benefits we anticipate, and may have a dilutive effect on our common stock.**

Concurrently with the issuance of the Cash Convertible Notes, we entered into Call Options and issued Warrants. We entered into the Call Options with the expectation that they would offset potential cash payments by us in excess of the principal amount of the Cash Convertible Notes upon conversion of the Cash Convertible Notes. In the event that the hedge counterparties fail to deliver potential cash payments to us, as required under the Call Options, we would not receive the benefit of such transaction. Separately, we also issued Warrants. The Warrants could separately have a dilutive effect to the extent that the market price per share of our common stock, as measured under the terms of the Warrants, exceeds the strike price of the Warrants. Further, the Warrants are accounted for as liabilities and remeasured at fair value through other financial expense, net in the consolidated statements of income. This will result in increased volatility to our results of operations.

**An impairment of goodwill and intangible assets could reduce our earnings.**

At December 31, 2016, our consolidated balance sheet reflected approximately \$2.0 billion of goodwill and approximately \$718.3 million of intangible assets. Goodwill is recorded when the purchase price of a business exceeds the fair value of the tangible and separately measurable intangible net assets. International Financial Reporting Standards (IFRS) require us to test goodwill for impairment on an annual basis or when events or circumstances occur indicating that goodwill might be impaired. Long-lived assets, such as intangible assets with finite useful lives, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The impairment review often cannot be done at the level of the individual asset and it must instead be applied to a group of assets. For the purpose of our annual goodwill impairment testing based on the current circumstances of how we manage our business, this group of assets is the Company as a whole. If we determine that any of our goodwill or intangible assets were impaired, we will be required to take an immediate charge to earnings and our results of operations could be adversely affected.

**Our strategic equity investments may result in losses.**

We have made, and may continue to make, strategic investments in businesses as opportunities arise. We periodically review the carrying value of these investments for impairment, considering factors that include the most recent stock transactions, book values from the most recent financial statements, and forecasts and expectations of the investee. The results of these valuations may fluctuate due to market conditions and other conditions over which we have no control.

Estimating the fair value of non-marketable equity investments in life science companies is inherently subjective. If actual events differ from our assumptions and other than temporary unfavorable fluctuations in the valuations of the investments are indicated, we could be required to write-down the investment. This could result in future charges on our earnings that could materially adversely affect our results of operations. It is uncertain whether or not we will realize any long-term benefits from these strategic investments.

**Doing business internationally creates certain risks.**

Our business involves operations in several countries outside of the U.S. Our consumable manufacturing facilities are located in Germany, China, the United Kingdom and the U.S. We source raw materials and subcomponents to manufacture our products from different countries. We have established sales subsidiaries in numerous countries including the U.S., Germany, Japan, the United Kingdom, France, Switzerland, Australia, Canada, the Netherlands, Sweden, Italy, Hong Kong, Singapore, Turkey, South Korea, Taiwan, Malaysia, China, Spain, Brazil, Mexico, South Africa and India. In addition, our products are sold through independent distributors serving more than 40 other countries. Conducting and launching operations on an international scale requires close coordination of activities across multiple jurisdictions and time zones and consumes significant management resources. We have invested heavily in computerized information systems in order to manage more efficiently the widely dispersed components of our operations. If we fail to coordinate and manage these activities effectively, our business and results of operations will be adversely affected.

Our operations are subject to other risks inherent in international business activities, such as general economic conditions in the countries in which we operate, longer accounts receivable payment cycles in certain countries, overlap of different tax structures, unexpected changes in regulatory requirements, and compliance with a variety of foreign laws and regulations. Other risks associated with international operations include import and export licensing requirements, trade restrictions, exchange controls and changes in tariff and freight rates, as may occur as a result of rising energy costs. As a result of these conditions, an inability to successfully manage our international operations could have a material adverse impact on our business and results of operations.

**We have made investments in and are expanding our business into emerging markets, which exposes us to risks.**

Our top seven emerging markets are Brazil, Russia, India, China, South Korea, Mexico and Turkey, which together accounted for approximately 16% of total sales in 2016, and we expect to continue to focus on expanding our business in these or other fast-growing markets. In addition to the currency and international operation risks described above, our international operations are subject to a variety of risks that include those arising out of the economy, political outlook and language and cultural barriers in countries where we have operations or do business. In many of these emerging markets, we may be faced with several risks that are more significant than in other countries in which we have a history of doing business. These risks include economies that may be dependent on only a few products and are therefore subject to significant fluctuations, weak legal systems which may affect our ability to enforce contractual rights, exchange controls, unstable governments, and privatization or other government actions affecting the flow of goods and currency. In conducting our business, we move products from one country to another and may provide services in one country from a subsidiary located in another country. Accordingly, we are vulnerable to abrupt changes in customs and tax regimes that could have significant negative impacts on our results of operations.

**Unethical behavior and non-compliance with laws by our sales agents, consultants, distributors or employees could seriously harm our business.**

Our business in countries with a history of corruption and transactions with foreign governments increase the risks associated with our international activities. Based on our international operations, we are subject to the U.S. Foreign Corrupt Practices Act (FCPA), the U.K. Bribery Act and other laws that prohibit improper payments or offers of payments to foreign governments and their officials and political parties by business entities for the purpose of obtaining or retaining business. We have operations, agreements with third parties and make sales in countries known to experience corruption. Further international expansion may involve increased exposure to such practices. Our activities in these countries, and in all countries as well, create risks of unauthorized payments or offers of payments, non-compliance with laws, or other unethical behavior by any of our employees, consultants, sales agents or distributors, that could be in violation of various laws, including the FCPA, even though these parties are not always subject to our control. It is our policy to implement safeguards to discourage these or other unethical practices by our employees and distributors including online and in-person employee trainings, periodic internal audits and standard reviews of our distributors. However, our existing safeguards and any future improvements may not prove to be effective, and our employees, consultants, sales agents or distributors may engage in conduct for which we might be held responsible. Violations of the FCPA and other laws may result in criminal or civil sanctions, which could be severe, and we may be subject to other liabilities, which could negatively affect our business, results of operations and financial condition.

**We depend on patents and proprietary rights that may fail to protect our business.**

Our success depends to a large extent on our ability to develop proprietary products and technologies and to establish and protect our patent and trademark rights in these products and technologies. As of December 31, 2016, we owned 349 issued patents in the United States, 241 issued patents in Germany and 1,613 issued patents in other major industrialized countries. In addition, at December 31, 2016, we had 776 pending patent applications, and we intend to file applications for additional patents as our products and technologies are developed. The patent positions of technology-based companies involve complex legal and factual questions and may be uncertain, and the laws governing the scope of patent coverage and the periods of enforceability of patent protection are subject to change. In addition, patent applications in the United States are maintained in secrecy until patents issue, and publication of discoveries in the scientific or patent literature tends to lag behind actual discoveries by several months. Therefore, no assurance can be given that patents will issue from any patent applications that we own or license or if patents do issue, that the claims allowed will be sufficiently broad to protect our technology. In addition, no assurance can be given that any issued patents that we own or license will not be challenged, invalidated or circumvented, or that the rights granted thereunder will provide us competitive advantages. Further, as issued patents expire, we may lose some competitive advantage as others develop competing products and as a result, we may lose revenue.

Certain of our products incorporate patents and technologies that are licensed from third parties and for certain products, these in-licensed patents together with other patents provide us with a competitive advantage. These licenses impose various commercialization, sublicensing and other obligations on us. Our failure to comply with these requirements could result in the conversion of the applicable license from being exclusive to non-exclusive or, in some cases, termination of the license, and as a result, we may lose some competitive advantage and experience a loss of revenue.

We also rely on trade secrets and proprietary know-how, which we seek to protect through confidentiality agreements with our employees and consultants. There can be no assurance that any confidentiality agreements that we have with our employees, consultants, outside scientific collaborators and sponsored researchers and other advisors will provide meaningful protection for our trade secrets or adequate remedies in the event of unauthorized use or disclosure of such information. There also can be no assurance that our trade secrets will not otherwise become known or be independently developed by competitors.

We currently engage in, and may continue to engage in, collaborations with academic researchers and institutions. There can be no assurance that under the terms of such collaborations, third parties will not acquire rights in certain inventions developed during the course of these collaborations.

**We are subject to risks associated with patent litigation.**

The biotechnology industry has been characterized by extensive litigation regarding patents and other intellectual property rights. We are aware that patents have been applied for and/or issued to third parties claiming technologies for the sample and assay technologies that are closely related to those we use. From time to time, we receive inquiries requesting confirmation that we do not infringe patents of third parties. We endeavor to follow developments in this field, and we do not believe that our technologies or products infringe any proprietary rights of third parties. However, there can be no assurance that third parties will not challenge our activities and, if so challenged, that we will prevail. In addition, the patent and proprietary rights of others could require that we alter our products or processes, pay licensing fees or cease certain activities, and there can be no assurance that we will be able to license any technologies that we may require on acceptable terms. In addition, litigation, including proceedings that may be declared by the U.S. Patent and Trademark Office or the International Trade Commission, may be necessary to respond to any assertions of infringement, enforce our patent rights and/or determine the scope and validity of our proprietary rights or those of third parties. Litigation could involve substantial cost, and there can be no assurance that we would prevail in any proceedings.

**Our business exposes us to potential product liability.**

The marketing and sale of our products and services for certain applications entail a potential risk of product liability. Although we are not currently subject to any material product liability claims, product liability claims may be brought against us in the future. Further, there can be no assurance that our products will not be included in unethical, illegal or inappropriate research or applications, which may in turn put us at risk of litigation. We carry product liability insurance coverage, which is limited in scope and amount. There can be no assurance that we will be able to maintain this insurance at a reasonable cost and on reasonable terms, or that this insurance will be adequate to protect us against any or all potential claims or losses.

We are subject to various laws and regulations generally applicable to businesses in the different jurisdictions in which we operate, including laws and regulations applicable to the handling and disposal of hazardous substances. The risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, we could be held liable for any damages that result, and any such liability could have a material adverse impact on us.

**Our operating results may vary significantly from period to period and this may affect the market price of our Common Shares.**

Our operating results may vary significantly from quarter to quarter, and also from year to year, since they are dependent upon a broad range of factors that include demand for our products, the level and timing of customer research budgets and commercialization efforts, the timing of government funding budgets of our customers, the timing of our research and development activities and related regulatory approvals, the impact of sales and marketing expenses, the impact of restructuring activities, the introduction of new products by us or our competitors, competitive market conditions, exchange rate fluctuations and general economic conditions. Our expense levels are based in part on our expectations as to future sales trends. As a result, sales and earnings may vary significantly from quarter to quarter or from year to year, and actual sales and earnings results in any one period will not necessarily be indicative of results to be anticipated in subsequent periods. Our results may also fail to meet or exceed the expectations of securities analysts or investors, which could cause a decline in the market price of our Common Shares.

**Our holding company structure makes us dependent on the operations of our subsidiaries.**

QIAGEN N.V. is incorporated under Dutch law as a public limited liability company (*naamloze vennootschap*), and is organized as a holding company. Currently, the material assets are the outstanding shares of the QIAGEN subsidiaries, intercompany receivables and other financial assets such as cash and short-term investments. As a result, QIAGEN N.V. is dependent upon payments, dividends and distributions from the subsidiaries for funds to pay operating and other expenses as well as to pay future cash dividends or distributions, if any, to holders of our Common Shares. Dividends or distributions by subsidiaries in a currency other than the U.S. dollar may result in a loss upon a subsequent conversion into U.S. dollars.

**U.S. civil liabilities may not be enforceable against us.**

We are incorporated under Dutch law, and substantial portions of our assets are located outside of the U.S. In addition, certain members of our Managing and Supervisory Boards and our officers reside outside the U.S. As a result, it may be difficult for investors to effect service of process within the U.S. upon us or such other persons, or to enforce outside the U.S. any judgments obtained against such persons in U.S. courts, in any action, including actions predicated upon the civil liability provisions of U.S. securities laws.

In addition, it may be difficult for investors to enforce, in original actions brought in courts in jurisdictions located outside the U.S., rights predicated upon the U.S. securities laws. There is no treaty between the U.S. and the Netherlands for the mutual recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters. As a result, a final judgment for the payment of money rendered by any federal or state court in the U.S. based on civil liability, whether or not predicated solely upon the federal securities laws, would not be directly enforceable in the Netherlands. However, if the party in whose favor such final judgment is rendered brings a new suit in a competent court in the Netherlands, such party may submit to the Dutch court the final judgment which has been rendered in the U.S. If the Dutch court finds that the jurisdiction of the federal or state court in the U.S. has been based on grounds that are internationally acceptable and that proper legal procedures have been observed, the Dutch court will, in principle, give binding effect to the final judgment which has been rendered in the U.S. without substantive re-examination or re-litigation on the merits of the subject matter thereof, unless such judgment contravenes Dutch principles of public policy. Based on the foregoing, there can be no assurance that U.S. investors will be able to enforce against us, members of our Managing or Supervisory Boards, or officers who are residents of the Netherlands or countries other than the U.S. any judgments obtained in U.S. courts in civil and commercial matters, including judgments under the federal securities laws. In addition, there is doubt as to whether a Dutch court would impose civil liability on us, the members of our Managing or Supervisory Boards, or our officers in an original action predicated solely upon the federal securities laws of the U.S. brought in a court of competent jurisdiction in the Netherlands against us or such members or officers, respectively.

**Our Common Shares may have a volatile public trading price.**

The market price of our Common Shares since our initial public offering in September 1996 has increased significantly and been highly volatile. In the last two years, the price of our Common Shares has ranged from a high of \$28.84 to a low of \$19.94 on NASDAQ, and a high of €27.26 to a low of €17.76 on the Frankfurt Stock Exchange. In addition to overall stock market fluctuations, factors that may have a significant impact on the price of our Common Shares include:

- announcements of technological innovations or the introduction of new products by us or our competitors;
- developments in our relationships with collaborative partners;
- quarterly variations in our operating results or those of our peer companies;
- changes in government regulations, tax laws or patent laws;
- developments in patent or other intellectual property rights;
- developments in government spending budgets for life sciences-related research;
- general market conditions relating to the diagnostics, applied testing, pharmaceutical and biotechnology industries; and
- impact from foreign exchange rates.

The stock market has from time to time experienced extreme price and trading volume fluctuations that have particularly affected the market for technology-based companies. These fluctuations have not necessarily been related to the operating performance of these companies. These broad market fluctuations may adversely affect the market price of our Common Shares.

**Holders of our Common Shares should not expect to receive dividend income.**

In January 2017, we completed a synthetic share repurchase that combined a direct capital repayment with a reverse stock split and we plan to complete an additional share repurchase program of up to \$50.0 million by the end of 2017. We do not anticipate paying any cash dividends on our Common Shares for the foreseeable future, and until the January 2017 distribution in connection with a synthetic share repurchase, we have not paid cash dividends since our inception. Although we do not anticipate paying any cash dividends on a regular basis, the distribution of any cash dividends in a currency other than the U.S. dollar will be subject to the risk of foreign currency transaction losses. Investors should not invest in our Common Shares if they are seeking dividend income; the only return that may be realized through investing in our Common Shares would be through an appreciation in the share price.

**Holders of our Common Shares may not benefit from continued stock repurchase programs.**

Between October 2012 and April 2013, we repurchased a total of 5.1 million of our Common Shares for an aggregate cost of \$99.0 million, and between September 2013 and June 2014, we repurchased an additional 4.4 million of our Common Shares for \$100.4 million (including performance fees). In 2014 and 2015, we repurchased a total of 2.9 million Common Shares for an aggregate cost of \$69.9 million under our third share repurchase program. In January 2017, we completed a synthetic share repurchase that combined a direct capital repayment with a reverse stock split. The transaction was announced in August 2016 and involved an approach used by various large, multinational Dutch companies to provide returns to all shareholders in a faster and more efficient manner than traditional open-market purchases. \$244.0 million was returned to shareholders through the transaction, which reduced the total number of issued common shares by approximately 3.7% to 230.8 million (of which 4.95 million in treasury) as of January 31, 2017. In addition to the synthetic share repurchase, we announced additional share repurchases to take place via the open market during the remainder of 2017 with a view to return an aggregate amount of \$300.0 million to our shareholders.

The purpose of these repurchases has been to hold the shares in treasury in order to satisfy obligations from exchangeable debt instruments and/or employee share-based remuneration plans and thus to reduce dilution to existing holders of our Common Shares. We may decide not to continue such programs in the future, the covenants we have with our lenders may limit our ability to use available cash to do so, and the market price of our Common Shares may make such repurchases less desirable. In any of these cases, holders of our Common Shares may suffer dilution from conversion of our indebtedness or issuance of shares pursuant to employee remuneration plans that would otherwise be at least partially offset by repurchased shares.

**Future sales and issuances of our Common Shares could adversely affect our stock price.**

Any future sale or issuance of a substantial number of our Common Shares in the public market, or any perception that a sale may occur, could adversely affect the market price of our Common Shares. Under Dutch law, a company can issue shares up to its authorized share capital provided for in its Articles of Association. Pursuant to our Articles of Association, our authorized share capital amounts to EUR 9.0 million, which is divided into 410.0 million common shares, 40.0 million financing preference shares and 450.0 million preference shares, with all shares having a EUR 0.01 par value. As of December 31, 2016, a total of approximately 234.6 million Common Shares were outstanding along with approximately 11.6 million additional

shares reserved for issuance upon exercise or release of outstanding stock options and awards, of which 1.4 million were vested. A total of approximately 17.9 million Common Shares are reserved and available for issuances under our stock plans as of December 31, 2016, including the shares subject to outstanding stock options and awards. The majority of our outstanding Common Shares may be sold without restriction, except shares held by our affiliates, which are subject to certain limitations on resale. Additionally, the Warrants issued in connection with the Cash Convertible Notes Call Spread Overlay cover an aggregate of 25.8 million shares of our common stock (subject to anti-dilution adjustments under certain circumstances).

**Shareholders who are United States residents could be subject to unfavorable tax treatment.**

We may be classified as a “passive foreign investment company,” or a PFIC, for U.S. federal income tax purposes if certain tests are met. Our treatment as a PFIC could result in a reduction in the after-tax return to holders of Common Shares and would likely cause a reduction in the value of these shares. If we were determined to be a PFIC for U.S. federal income tax purposes, highly complex rules would apply to our U.S. shareholders. We would be considered a PFIC with respect to a U.S. shareholder if for any taxable year in which the U.S. shareholder held the Common Shares, either (i) 75% or more of our gross income for the taxable year is passive income; or (ii) the average value of our assets (during the taxable year) which produce or are held for the production of passive income is at least 50% of the average value of all assets for such year. Based on our income, assets and activities, we do not believe that we were a PFIC for U.S. federal income tax purposes for our taxable year ended December 31, 2016, and do not expect to be a PFIC for the current taxable year or any future taxable year. No assurances can be made, however, that the Internal Revenue Service will not challenge this position or that we will not subsequently become a PFIC. In countries outside the U.S., other or similar tax regimes may apply and result in unfavorable tax treatment for any dividends received.

**Provisions of our Articles of Association and Dutch law and an option we have granted may make it difficult to replace or remove management and may inhibit or delay a takeover.**

Our Articles of Association (Articles) provide that our shareholders may only suspend or dismiss our Managing Directors and Supervisory Directors against their wishes with a vote of two-thirds of the votes cast if such votes represent more than 50% of our issued share capital. If the proposal was made by the joint meeting of the Supervisory Board and the Managing Board, a simple majority is sufficient. The Articles also provide that if the members of our Supervisory Board and our Managing Board have been nominated by the joint meeting of the Supervisory Board and Managing Board, shareholders may only overrule this nomination with a vote of two-thirds of the votes cast if such votes represent more than 50% of our issued share capital.

Certain other provisions of our Articles allow us, under certain circumstances, to prevent a third party from obtaining a majority of the voting control of our Common Shares through the issuance of Preference Shares. Pursuant to our Articles and the resolution adopted by our General Meeting of Shareholders, our Supervisory Board is entitled to issue Preference Shares in case of an intended takeover of our company by (i) any person who alone or with one or more other persons, directly or indirectly, have acquired or given notice of an intent to acquire (beneficial) ownership of an equity stake which in aggregate equals 20% or more of our share capital then outstanding or (ii) an “adverse person” as determined by the Supervisory Board. If the Supervisory Board opposes an intended takeover and authorizes the issuance of Preference Shares, the bidder may withdraw its bid or enter into negotiations with the Managing Board and/or Supervisory Board and agree on a higher bid price for our Shares.

In 2004, we granted an option to the Stichting Preferente Aandelen QIAGEN, or the Foundation (*Stichting*), subject to the conditions described in the paragraph above, which allows the Foundation to acquire Preference Shares from us. The option enables the Foundation to acquire such number of Preference Shares as equals the number of our outstanding Common Shares at the time of the relevant exercise of the option, less one Preference Share. When exercising the option and exercising its voting rights on these Preference Shares, the Foundation must act in our interest and the interests of our stakeholders. The purpose of the Foundation option is to prevent or delay a change of control that would not be in the best interests of us and our stakeholders. An important restriction on the Foundation’s ability to prevent or delay a change of control is that a public offer must be announced by a third party before it can issue (preference or other) protective shares that would enable the Foundation to exercise rights to 30% or more of the voting rights without an obligation to make a mandatory offer for all shares held by the remaining shareholders. In addition, the holding period for these shares by the Foundation is restricted to two years, and this protective stake must fall below the 30% voting rights threshold before the two-year period ends.

**Note Regarding Forward-Looking Statements and Risk Factors**

Our future operating results may be affected by various risk factors, many of which are beyond our control. Certain statements included in this Annual Report and the documents incorporated herein by reference may be forward-looking statements within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended, and Section 21E of the U.S. Securities Exchange Act of 1934, as amended, including statements regarding potential future net sales, gross profit, net income and liquidity. These statements can be identified by the use of forward-looking terminology such as “believe,” “hope,” “plan,” “intend,” “seek,” “may,” “will,” “could,” “should,” “would,” “expect,” “anticipate,” “estimate,” “continue” or other similar words. Reference is

made in particular to the description of our plans and objectives for future operations, assumptions underlying such plans and objectives, and other forward-looking statements. Such statements are based on management's current expectations and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. We caution investors that there can be no assurance that actual results or business conditions will not differ materially from those projected or suggested in such forward-looking statements as a result of various factors. Factors which could cause such results to differ materially from those described in the forward-looking statements include those set forth in the risk factors below. As a result, our future success involves a high degree of risk. When considering forward-looking statements, you should keep in mind that the risk factors could cause our actual results to differ significantly from those contained in any forward-looking statement.

## **Sustainability**

QIAGEN integrates sustainability throughout our business. We aim to save energy and reduce environmental impacts, drive economic success with healthy, high-performance workplaces, and make improvements in life possible as a good corporate citizen.

These three dimensions of sustainability are interlinked, reinforcing each other. We pledge to continually evaluate the potential green impact of our business, its economic influence and our corporate citizenship around the world. Our commitment to sustainability does not stop with formal regulations. As a market and innovation leader in life sciences and molecular diagnostics, we strive to go above and beyond simply following requirements of environmental and labor laws. There is much room for innovation in driving sustainable development in our industry, and we are resolved to continue to move forward.

### *Green Practices*

Protecting the environment, health and safety has always been a hallmark of QIAGEN. From the start, our sample preparation products set the standard for safe, environmentally sound methods, replacing highly toxic procedures that once posed serious threats to laboratory workers' health and the environment. Today, our commitment to protect and preserve natural resources extends well beyond product safety. Green practices are actively reducing the environmental impact of QIAGEN's business around the world. These initiatives include:

- **Energy savings:** QIAGEN has installed sophisticated energy recovery and control systems in office and operational locations to provide only the minimum power required. Use of power-friendly lighting, air conditioning and manufacturing equipment; sustainable selection of suppliers; and optimized operating hours contribute to energy efficiency.
- **Green buildings:** Energy savings play a major role in site investments, implementing green standards by incorporating specifications for energy and water efficiency, air quality and materials. For example, new buildings at regional headquarters in Germany and the United States have achieved certifications under the U.S. Green Building Council's LEED program
- **Paper reduction:** To support responsible paper consumption, QIAGEN pursues a broad policy of reducing printed material, as well as sustainable sourcing. As a member of the Forest Stewardship Council, QIAGEN's policy is to select suppliers that comply with FSC standards for printing and sustainable paper production. Digital approaches to doing business are a major focus, and online tools and eCommerce can make paper unnecessary.
- **Packaging:** QIAGEN's procurement division requires suppliers requiring them to reduce packaging volumes, refraining from use of PVC and other potentially hazardous materials. Biodegradable loose fill packaging is made from 100% recycled polystyrene. Since 2013, QIAGEN has substantially reduced kit volumes by using fewer inserts and optimizing design
- **Recycling:** At most QIAGEN sites, waste reduction and recycling of cardboard, paper and the like are standard business practices - part of our commitment to conduct operations in a sustainable manner and in accordance with regulations.
- **Water consumption:** Recognizing water as a precious resource, our main administration and production facility in the United States now uses "process" water produced during manufacturing to cool the building. Hand-activated faucets have been installed in all restrooms, and water coolers have been replaced with filtered water dispensers.
- **Transportation:** QIAGEN provides incentives for employees to use public transportation, has installed e-charging stations for cars and bikes, and selects ecological and CO2-efficient vehicles as company cars. We have placed manufacturing machines at some suppliers' sites to reduce transportation-related impacts on the environment.

- **Organizational commitment:** Our operations employ a concept called QIAzen, derived from the Japanese word KAIZEN, which means continuous improvement. By optimizing operational workflows throughout manufacturing and production, QIAGEN reduces transportation, saves electricity and minimizes other impacts.

### *Economic Progress*

QIAGEN contributes to society's economic sustainability primarily by nurturing long-term business success. Our mission extends beyond creating shareholder value to making improvements in life possible for global and local stakeholders - providing jobs, driving growth, enhancing healthcare and other areas of life, and funding public services. Lasting success demands the efficient use and sustained cultivation of all of our assets and resources. Examples of initiatives and programs include:

- **Training and retention:** QIAGEN views employee development as an integral success factor in creating lasting value. Professional training and leadership development are an ongoing process reaching all employees - cycling from annual performance reviews and development discussions, to training participation and learning transfer, and then back to individual reviews. A series of regional training programs are designed to create a work environment of employee empowerment and engagement at all levels.
- **Business development:** QIAGEN follows a rigorous process to take advantage of rapid growth opportunities in emerging markets, methods and customer segments. The strategy includes acquisitions of promising new molecular testing technologies and commercial collaborations to support strong organic growth and drive future profitability.
- **Innovation:** Just as QIAGEN's sample kits revolutionized molecular biology in the 1980s, we are committed to expanding our global leadership in Sample to Insight solutions. Our research and development investments are among the highest in the industry, with more than 1,000 R&D employees on three continents. To make innovation as effective and efficient as possible, QIAGEN embraces "agile" development, moving through iterative stages to create new products, with rapid adjustments based on empirical feedback. Development of the GeneReader NGS System, for example, benefited from an agile, collaborative process.

### *Corporate Citizenship*

QIAGEN's corporate mission to make improvements in life possible focuses our attention on the long-term welfare of society. Our commitment to Corporate Social Responsibility focuses on open and equal access to lifesaving molecular diagnostics for people around the world, including the poorest regions. We also want to help ensure that communities where we work can flourish, by supporting local initiatives aiming to improve lives in cultural, social or scientific settings. Activities in this area include:

- **QIAGENcares:** Our Corporate Social Responsibility Program is an umbrella for the support of initiatives that help improve lives by aiding in the fight against diseases in which QIAGEN products can play an important role. While QIAGENcares includes a broad range of initiatives, we have a strong commitment to fighting cervical cancer through testing for human papillomavirus (HPV) infections and have launched a donation program for 1 million HPV tests to bring advanced cervical cancer screening to developing countries.
- **Local initiatives:** QIAGEN supports a variety of initiatives in places where the company does business. These range across sponsorship of health walks, music festivals, preschool science education, disease awareness campaigns, installation of school laboratories and promotion of biology in school curricula. In some locations we have programs to mobilize employees to volunteer (backed by company funds) for projects that improve the lives of people in local and national communities. We also collaborate with scientists in novel environmental and humanitarian projects made possible by QIAGEN technologies.
- **Employee programs:** QIAGEN regularly provides services and programs to promote employees' health and help them balance their personal lives with a dynamic, high-performance work environment. QIAGEN offers in-house corporate childcare, sabbatical programs, and company-sponsored fitness and health facilities.

More information about QIAGEN's activities and the progress we are making is available online at [www.QIAGEN.com/about-us/who-we-are/sustainability/](http://www.QIAGEN.com/about-us/who-we-are/sustainability/).

### **Significant direct and indirect shareholdings**

The following table sets forth certain information as of December 31, 2016, concerning the ownership of Common Shares of each holder of greater than 5% ownership. None of these holders have any different voting rights than other holders of our Common Shares.

| <b>Name and Country of Residence</b>       | <b>Shares Beneficially Owned</b> |                                         |
|--------------------------------------------|----------------------------------|-----------------------------------------|
|                                            | <b>Number</b>                    | <b>Percent Ownership <sup>(1)</sup></b> |
| PRIMECAP Management Company, United States | 19,143,036 (2)                   | 8.16%                                   |
| BlackRock, Inc., United States             | 19,433,223 (3)                   | 8.28%                                   |
| Franklin Resources, Inc., United States    | 25,705,128 (4)                   | 10.96%                                  |

- (1) The percentage ownership was calculated based on 234,560,586 Common Shares outstanding as of December 31, 2016.
- (2) Of the 19,143,036 shares attributed to PRIMECAP Management Company, it has sole voting power over 9,238,709 and sole dispositive power over all 19,143,036 shares. This information is based solely on the Schedule 13G filed by PRIMECAP Management Company with the Securities and Exchange Commission on February 9, 2017, which reported ownership as of December 31, 2016.
- (3) Of the 19,433,223 shares attributed to BlackRock, Inc., it has sole voting power over 17,729,736 and sole dispositive power over all 19,433,223 shares. This information is based solely on the Schedule 13G filed by BlackRock, Inc. with the Securities and Exchange Commission on January 25, 2017, which reported ownership as of December 31, 2016.
- (4) Of the 25,705,128 shares attributed to Franklin Resources, Inc., it shares voting and dispositive powers over all 25,705,128 shares with various members of a reporting group of which it is part. This information is based solely on the Schedule 13G filed by Franklin Resources Inc. with the Securities and Exchange Commission on February 7, 2017, which reported ownership as of December 31, 2016.

Our common stock is traded on the NASDAQ Global Select Market in the United States and on the Prime Standard Segment of the Frankfurt Stock Exchange in Germany. A significant portion of our shares are held electronically in the account of a stockbroker, therefore we generally have no way of determining who our shareholders are, their geographical location or how many shares a particular shareholder owns. As of January 31, 2017 there were 142 shareholders of record of our Common Shares.

#### **Holders of any securities with special control rights**

Not applicable.

#### **System of control of any employee share scheme where the control rights are not exercised directly by the employees**

Not applicable.

#### **Restrictions on voting rights**

At the General Meeting, each share shall confer the right to cast one vote, unless otherwise provided by law or our Articles. No votes may be cast in respect of shares that we or our subsidiaries hold, or by usufructuaries and pledgees. All shareholders and other persons entitled to vote at General Meetings are entitled to attend General Meetings, to address the meeting and to vote. They must notify the Managing Board in writing of their intention to be present or represented not later than on the third day prior to the day of the meeting, unless the Managing Board permits notification within a shorter period of time prior to any such meeting. Subject to certain exceptions, resolutions may be passed by a simple majority of the votes cast.

#### **Agreements between shareholders which are known to the Company and may result in restrictions on the transfer of securities and/or voting rights**

Not applicable.

#### **Rules governing the appointment and replacement of board members and the amendment of the articles of association**

Supervisory Directors and Managing Directors are appointed annually for the period beginning on the date following the Annual General Meeting up to and including the date of the Annual General Meeting held in the following fiscal year.

Managing Directors shall be appointed by the General Meeting of our shareholders upon the joint meeting of the Supervisory Board and the Managing Board, or Joint Meeting, having made a binding nomination for each vacancy. However, the General Meeting may at all times overrule the binding nature of such a nomination by a resolution adopted by at least a two-thirds majority of the votes cast, if such majority represents more than half the issued share capital. This is different from the provisions of many American corporate statutes, including the Delaware General Corporation Law, which give the directors of a corporation greater authority in choosing the executive officers of a corporation. Under our Articles, the General Meeting may suspend or dismiss a managing director at any time. The Supervisory Board shall also at all times be entitled to suspend (but not

to dismiss) a Managing Director. The Articles provide that the Supervisory Board may adopt management rules governing the internal organization of the Managing Board.

The Supervisory Directors shall be appointed by the General Meeting upon the Joint Meeting having made a binding nomination for each vacancy. If during a financial year a vacancy occurs in the Supervisory Board, the Supervisory Board may appoint a Supervisory Director who will cease to hold office at the next Annual General Meeting. Under Dutch law and the Dutch Code, a Supervisory Director must excuse him or herself in the case of any conflict of interest. If all Supervisory Directors have a conflict of interest, the relevant resolution shall be adopted by the General Meeting. Decisions to enter into transactions under which a Supervisory Director would have a conflict of interest that are of material significance to QIAGEN and/or to the Supervisory Director concerned, require the approval of the Supervisory Board. Under our Articles, the General Meeting may suspend or dismiss a Supervisory Director at any time. This is different from the provisions of many American corporate statutes, including the Delaware General Corporation Law, which provides that directors may vote to fill vacancies on the board of directors of a corporation.

The Selection and Appointment (Nomination) Committee is primarily responsible for the preparation of selection criteria and appointment procedures for members of the Supervisory Board and Managing Board as well as the periodic evaluation of the scope and composition of the Managing Board and the Supervisory Board, including the profile of the Supervisory Board. Additionally, the Selection and Appointment Committee periodically evaluates the functioning of individual members of the Managing Board and Supervisory Board, reporting these results to our Supervisory Board. It also proposes the (re-) appointments of members of our Managing Board and Supervisory Board and supervises the policy of our Managing Board in relation to selection and appointment criteria for senior management.

A resolution of the General Meeting to amend our Articles, dissolve QIAGEN, issue shares or grant rights to subscribe for shares or limit or exclude any pre-emptive rights to which shareholders shall be entitled is valid only if proposed to the General Meeting by the Supervisory Board.

A resolution of the General Meeting to amend our Articles is further only valid if the complete proposal has been made available for inspection by the shareholders and the other persons entitled to attend General Meetings at our offices as from the day of notice convening such meeting until the end of the meeting. A resolution to amend our Articles to change the rights attached to the shares of a specific class requires the approval of the relevant class meeting.

#### **Powers of board members and in particular the power to issue or buy back shares**

The Managing Board manages QIAGEN and is responsible for defining and achieving QIAGEN's aims, strategy, policies and results. The Managing Board is also responsible for complying with all relevant legislation and regulations as well as for managing the risks associated with the business activities and the financing of QIAGEN. It reports related developments to and discusses the internal risk management and control systems with the Supervisory Board and the Audit Committee. The Managing Board is accountable for the performance of its duties to the Supervisory Board and the General Meeting of Shareholders (General Meeting). The Managing Board provides the Supervisory Board with timely information necessary for the exercise of the duties of the Supervisory Board. In discharging its duties, the Managing Board takes into account the interests of QIAGEN, its enterprises and all parties involved in QIAGEN, including shareholders and other stakeholders.

The members of our Supervisory Board have the powers assigned to them by Dutch law and the Articles. The Supervisory Board assists the Managing Board by providing advice relating to the business activities of QIAGEN. In discharging its duties, the Supervisory Board takes into account the interests of QIAGEN, its enterprise and all parties involved in QIAGEN, including shareholders and other stakeholders. In particular, the Supervisory Board has the authority to (i) issue common shares up to its presently authorized capital of 410 million, (ii) issue Financing Preference Shares up to its presently authorized capital of 40 million (iii) grant rights to subscribe for such common shares and Financing Preference Shares and (iv) exclude or limit the pre-emptive rights of existing shareholders relating to up to 50% of the number of common shares to be issued or rights to subscribe for common shares.

We may acquire our own shares, subject to certain provisions of Dutch law and our Articles, if (i) shareholders' equity less the payment required to make the acquisition does not fall below the sum of paid-up and called-up capital and any reserves required by Dutch law or the Articles and (ii) we and our subsidiaries would not thereafter hold shares with an aggregate nominal value exceeding half of our issued share capital. Shares that we hold in our own capital or shares held by one of our subsidiaries may not be voted. The Managing Board, subject to the approval of the Supervisory Board, may affect our acquisition of shares in our own capital. Our acquisitions of shares in our own capital may only take place if the General Meeting has granted to the Managing Board the authority to effect such acquisitions. Such authority may apply for a maximum period of 5 years and must specify the number of shares that may be acquired, the manner in which shares may be acquired and the price limits within which shares may be acquired. Dutch corporate law allows for the authorization of the Managing Board to purchase a number of shares equal to up to 50% of the Company's issued share capital on the date of the acquisition. On June 21, 2016, the General Meeting resolved to extend the authorization of the Managing Board in such manner that the

Managing Board may cause us to acquire shares in our own share capital, for an 18-month period beginning June 21, 2016 until December 21, 2017, without limitation at a price between one Euro cent (Euro 0.01) and one hundred ten percent (110%) of the price for such shares on the NASDAQ Global Select Market or, as applicable, the Frankfurt Stock Exchange, for the five trading days prior to the day of purchase, or, with respect to Preference and Finance Preference shares, against a price between one Euro cent (Euro 0.01) and three times the issuance price and in accordance with applicable provisions of Dutch law and our Articles.

**Significant agreements to which the Company is a party and which take effect after or terminate upon a change of control of the Company following a takeover bid**

Certain other provisions of our Articles allow us, under certain circumstances, to prevent a third party from obtaining a majority of the voting control of our common shares by issuing preference shares. Pursuant to our Articles and the resolution adopted by our General Meeting on June 16, 2004, QIAGEN's Supervisory Board is entitled to resolve to issue Preference Shares in case of an intended take-over of our Company by (i) any person who alone or with one or more other persons, directly or indirectly, have acquired or given notice of an intent to acquire (beneficial) ownership of an equity stake which in aggregate equals 20% or more of our share capital then outstanding or (ii) an "adverse person" as determined by the Supervisory Board. If the Supervisory Board opposes an intended take-over and authorizes the issuance of preference shares, the bidder may withdraw its bid or enter into negotiations with the Managing Board and/or Supervisory Board and agree on a higher bid price for our shares.

In 2004 (as amended in 2008), we granted an option to the Stichting Preferente Aandelen QIAGEN (the "Foundation" (Stichting)), whereby the exercise of the option by the Foundation is subject to the conditions described in the paragraph above and which option allows the Foundation to acquire preference shares from us. The option enables the Foundation to acquire such number of preference shares as equals the number of our outstanding common shares at the time of the relevant exercise of the right less one share. When exercising the option and exercising its voting rights on such shares, the Foundation must act in our interest and the interests of our stakeholders. The purpose of the Foundation option is to prevent or delay a change of control that would not be in the best interests of us and our stakeholders. An important restriction on the Foundation's ability to prevent or delay a change of control is that issuing (preference or other) protective shares enabling the Foundation to exercise 30% or more of the voting rights without the obligation to make a mandatory offer for all shares held by the remaining shareholders, is only allowed after a public offer has been announced by a third party. In addition, the holding of such a block of shares by the Foundation is restricted to two years and as a consequence, the size of the protective stake will need to be decreased below the 30% voting rights threshold before the two year period lapses.

We adopted the QIAGEN N.V. Amended and Restated 2005 Stock Plan (the 2005 Plan) which was approved by our shareholders on June 14, 2005. It expired by its terms in April 2015, at which time no further awards will be able to be granted under the 2005 Plan. On June 25, 2014, our shareholders approved the QIAGEN N.V. 2014 Stock Plan (the 2014 Plan), which replaced the 2005 Plan in April 2015. An aggregate of 9.1 million Common Shares were reserved for issuance pursuant to the 2014 Stock Plan, subject to certain antidilution adjustments.

Pursuant to the 2014 Plan, stock rights, which include options to purchase our Common Shares, stock grants and stock-based awards, may be granted to employees and consultants of QIAGEN and its subsidiaries and to Supervisory Directors. Options granted pursuant to the 2014 Plan may either be incentive stock options within the meaning of Section 422 of the United States Internal Revenue Code of 1986, as amended (the Code), or non-qualified stock options. Options granted to members of the Supervisory Board and the Managing Board must have an exercise price that is higher than the market price at the time of grant. Generally, each of the options has a term of ten years, subject to earlier termination in the event of death, disability or other termination of employment. The vesting and exercisability of certain stock rights will be accelerated in the event of a Change of Control, as defined in the agreements under the 2014 Plan.

The Plan is administered by the Compensation Committee of the Supervisory Board, which selects participants from among eligible employees, consultants and directors and determines the number of shares subject to the stock-based award, the length of time the award will remain outstanding, the manner and time of the award's vesting, the price per share subject to the award and other terms and conditions of the award consistent with the Plan. The Compensation Committee's decisions are subject to the approval of the Supervisory Board.

The vesting and exercisability of certain stock rights will be accelerated in the event of a Change of Control. A "Change of Control" means the occurrence of a merger or consolidation of QIAGEN, whether or not approved by the Board of Directors, other than a merger or consolidation which would result in the voting securities of QIAGEN outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or the parent of such corporation) at least 50% of the total voting power represented by the voting securities of QIAGEN or such surviving entity or parent of such corporation, as the case may be, outstanding immediately after such merger or consolidation, or the stockholders of QIAGEN approve an agreement for the sale or disposition by QIAGEN of all or substantially all of QIAGEN's assets.

Certain of our employment contracts contain provisions which guarantee the payments of certain amounts in the event of a change in control, as defined in the agreements, or if the executive is terminated for reasons other than cause, as defined in the agreements. At December 31, 2016, the commitment under these agreements totaled \$15.2 million (2015: 15.3 million).

**Agreements between the Company and its board members or employees providing for compensation if they resign or are made redundant without valid reason or if their employment ceases because of a takeover bid**

The members of the Managing Board are appointed annually by the General Meeting of Shareholders based on the nomination of the Joint Meeting. Further, the members of the Managing Board have entered into employment agreements with QIAGEN N.V. and other QIAGEN affiliates. The term of these agreements varies for each Managing Board member due to individual arrangements and goes beyond the one year term of appointment by the General Meeting of Shareholders. These agreements cannot be terminated without cause and, absent such cause, have to be fulfilled during their stated term. These agreements contain provisions which guarantee the payments of certain amounts in the event of a change in control, as defined in the agreements. There are no arrangements for any extra compensation in case of resignation or redundancy.

The members of the Supervisory Board are also appointed annually by the General Meeting of Shareholders based on the nomination of the Joint Meeting. There are no additional employments in place and there are no arrangements for any extra compensation in case of resignation or redundancy. The General Meeting determines the remuneration of the members of the Supervisory Board.

**Reporting in accordance with Directive 2004/25/EC of the European Parliament and of the Council of April 21, 2004, on takeover bids**

**Structure of our capital, including securities which are not admitted to trading on a regulated market in a Member State of the European Union**

The authorized classes of our shares consist of common shares, Financing Preference Shares and Preference Shares. No Financing Preference Shares or Preference Shares have been issued.

As of December 31, 2016, a total of approximately 234.6 million Common Shares were outstanding along with approximately 11.6 million additional shares reserved for issuance upon exercise or release of outstanding stock options and awards, of which 1.4 million were vested. A total of approximately 17.9 million Common Shares are reserved and available for issuances under our stock plans as of December 31, 2016, including the shares subject to outstanding stock options and awards. Additionally, holders of the Warrants issued as part of the Call Spread Overlay discussed further in Note 15 'Financial Debts', cover an aggregate of 25.8 million shares of our Common Stock (subject to anti-dilution adjustments under certain circumstances).

**Common Shares - Restrictions on the transfer of securities**

Common Shares are issued in registered form only. Until January 24, 2017 Common Shares were available either without issue of a share certificate (known as Type I shares) or with issue of a share certificate (known as Type II shares) in either case in the form of an entry in the share register. Per January 24, 2017 only shares without issue of a share certificate are available. At the discretion of the Supervisory Board, shares (previously known as Type I shares) may be issued and the holders of those shares will be registered in either our shareholders register with American Stock Transfer & Trust Company, or New York Transfer Agent, our transfer agent and registrar in New York, or our shareholder register with TMF FundServices B.V., Westblaak 89, NL-3012 KG Rotterdam, the Netherlands. The Type II shares were registered with our New York Transfer Agent.

The transfer of registered shares requires that we issue a written instrument of transfer and the written acknowledgment of such transfer. At the time Type II shares existed, the surrender of share certificates to the New York Transfer Agent was required for the transfer of Type II shares. Upon surrender of a share certificate for the purpose of transfer of the relevant shares, we (or the New York Transfer Agent in our name) acknowledged the transfer either by endorsement on the share certificate itself or by issuance of a new share certificate to the transferee, at the discretion of the Managing Board.

**Subsequent Events**

*Acquisition*

In January 2017, we acquired OmicSoft Corporation, a privately owned bioinformatics company, that markets a suite of tools that allow customers to analyze and visualize data sets and compare them to large, publicly available multi-omics data sets. The acquisition was not individually significant to the overall consolidated financial statements.

*Synthetic Share Repurchase*

In January 2017, QIAGEN completed a synthetic share repurchase that combined a direct capital repayment with a reverse stock split as discussed in Note 17 *Equity*.

## **Outlook**

In diverse markets around the world, QIAGEN's strategy is to build upon growth opportunities in molecular technologies serving four customer classes: Molecular Diagnostics, Applied Testing, Pharma and Academia. Our business, therefore, is exposed to a wide variety of technological advances and market needs. We have grown in recent years with a flexible strategy for developing innovative new products, partnering, and acquiring companies or technologies with high growth potential. The long-term growth of healthcare needs, both in developed and emerging markets, is a key driver of increasing demand for innovative diagnostics as well as for biomedical research technologies. Our leadership in Sample to Insight solutions is the basis for all of QIAGEN's products, and we focus on meeting the needs of customers across the continuum of research and commercial testing. QIAGEN continually adds new systems and products to efficiently transform raw samples into valuable molecular insights that add value for our expanding base of customers.

### *QIAGEN Perspectives for 2017*

QIAGEN expects to sustain solid sales growth and increase profitability in 2017 and beyond, building its leadership in molecular testing with an innovative offering of differentiated Sample to Insight solutions across the value chain. Providing end-to-end solutions is a key competitive advantage in serving customers ranging from clinicians using Molecular Diagnostics to researchers in Academia and the pharmaceutical industry, as well as laboratories in human ID/forensics, veterinary diagnostics and food safety. QIAGEN is executing on strategies to further enhance financial performance and returns to shareholders. While sustaining top-line growth with targeted investments in innovation and commercial support, QIAGEN has initiated a series of actions to deliver on operating leverage and to increase profitability and cash flows. Priorities also include optimizing the balance sheet for shareholder returns and refining a performance-driven culture.

The drive to excel through 2020 begins with the new sales trajectory of QIAGEN's differentiated product portfolio, focusing on a group of catalysts that generated double-digit growth and more than one-third of total sales in 2016. These engines of sales growth include: adding to QIAGEN's long-standing leadership in innovative core technologies for sample processing; expanding the market for QuantiFERON-TB technology in support of tuberculosis control; driving the adoption of next-generation sequencing in clinical research and diagnostics; extending QIAGEN's leadership in Personalized Healthcare for cancer and other diseases; increasing placements of the QIASymphony platform and sales of a growing menu of test content; and deepening QIAGEN's industry leadership in bioinformatics, integrated into Sample to Insight solutions for clinical and other molecular applications.

*Differentiated technologies* help laboratories process samples to extract, purify and stabilize the highest-quality nucleic acids for molecular testing. In 2016 QIAGEN further expanded its offering in rapidly growing areas such as minimally invasive liquid biopsies for analysis; Digital NGS solutions for quantification of DNA, RNA and miRNA in next-generation sequencing; studies of microbial communities and their impact on health and the environment; RNA analysis, gene expression and epigenetics; and single-cell research. In 2017 and beyond, QIAGEN expects to continue to add emerging technologies addressing front-end challenges in high-growth areas of molecular testing.

*QuantiFERON-TB tests* for latent tuberculosis infection accelerated to a growth pace of more than 25% CER in 2016. As healthcare authorities around the world launch proactive initiatives to eliminate tuberculosis (TB), modern QuantiFERON technology is displacing the century-old tuberculin skin test as the latent TB test of choice. Our fourth-generation test, QuantiFERON-TB Gold Plus, was submitted in late 2016 to the U.S. Food and Drug Administration, following successful launch in more than 60 countries. Recent guidelines from the World Health Organization and U.S. Preventive Services Task Force support the growth momentum, and QIAGEN plans to invest further to accelerate geographic expansion and drive conversion of the market to the QuantiFERON-TB tests.

*Next-generation sequencing (NGS)* is rapidly emerging from elite research labs into routine applications in clinical research and diagnostics, and QIAGEN is in the forefront of this move to the mainstream. In 2016 QIAGEN launched its GeneReader NGS System, the first purpose-built system for clinical panel testing with next-generation sequencing. GeneReader met its first-year target of more than 10% of new placements of benchtop sequencers for oncology, and in 2017 QIAGEN is rolling out significant performance enhancements and additional gene panels. QIAGEN also continues to expand its portfolio of "universal" pre-analytical solutions that serve an estimated 80% of all NGS workflows worldwide.

*Personalized healthcare* is expanding as genomic insights increasingly guide treatments across the spectrum of cancers, and personalized therapies based on molecular testing also are developing in other disease areas. QIAGEN offers a broad portfolio of companion diagnostics and is rolling out more, often partnering with pharmaceutical and biotech companies to co-develop companion diagnostics paired with their drugs. In 2016 QIAGEN surpassed 20 master collaboration agreements with pharma partners. QIAGEN is the only industry partner developing companion diagnostics for both PCR and NGS platforms, as well as other innovative molecular technologies for personalized medicine.

*QIASymphony* meets a broad range of customer needs for medium-throughput automation in sample processing, analysis with polymerase chain reaction (PCR), and reporting of insights. In 2016 QIASymphony surpassed its target of 1,750 cumulative

placements, serving as a growth engine with double-digit sales gains in consumables. New applications in 2016 included automating liquid biopsy workflows and serving as a front end for the GeneReader. In 2017, the goal is to reach 2,000 cumulative placements. QIAGEN will continue to expand QIASymphony's industry-leading menu of diagnostic tests in Europe and other markets, with a U.S. focus on running laboratory-developed tests and processing samples for NGS or PCR.

*Bioinformatics* for QIAGEN is both a stand-alone business with industry-leading software to analyze and interpret genomic data - and a seamlessly integrated capability to deliver the "insights" in Sample to Insight solutions. In 2016 QIAGEN added RNA-seq Explorer for customers in the rapidly growing field of RNA analysis, introduced the Microbial Genomics Pro Suite for the special challenges of interpreting metagenomic data, and integrated QIAGEN Clinical Insight into the GeneReader NGS System for seamless reporting of actionable insights in clinical research and diagnosis. In 2017 QIAGEN will continue to expand and scale its bioinformatics capabilities to meet emerging needs in genomic analysis and interpretation, data sharing and reporting for research and clinical care.

In 2016 QIAGEN's growth portfolio overcame the smaller expected headwind from the U.S. market for cervical cancer screening, where QIAGEN has maintained market leadership but lost revenue due to aggressive price competition in recent years. In 2017 the headwind is expected to shrink further to about one percentage point of net sales.

In addition to focusing on growing market needs with innovative Sample to Insight solutions, QIAGEN will continue to implement actions to engage customers through digital and other channels, simplify and streamline its organization, and maximize value for shareholders.

#### *Global Economic Perspectives for 2017*

The consensus outlook for the world economy is a modest acceleration of growth in 2017 amid positive expectations for the United States and emerging markets. Global GDP is forecast by the World Bank to grow 2.7% in 2017 and 2.9% in 2018, up from estimated growth of 2.3% in 2016. After slow growth in 2016 due to weak commodity prices and global trade, economists now anticipate stronger trade based on oil and other commodities, plus acceleration in U.S. investment and manufacturing. However, uncertainties have increased amid political changes and evolving policies. The U.S. election created unknowns in fiscal and trade policies, and an economic setback could have ripple effects. Europe faces continued modest growth, as well as political unrest. China is expected to continue gradual cooling of its rapid growth with planned rebalancing toward consumer-driven activity. Japan remains in a lower-growth trend. A stronger global economy would stimulate demand in QIAGEN's business environment, but a downturn could hurt customers' spending. Economic changes affecting currency exchange rates also pose a risk to results reported in U.S. dollars.

#### *Industry Perspectives for 2017*

Genomic discoveries, dissemination of molecular testing in healthcare and other fields, and the rapid growth of next-generation sequencing and novel molecular testing approaches all present opportunities for QIAGEN in 2017 and beyond.

Molecular diagnostics is the most dynamic segment of the global *in vitro* diagnostics market, growing at a compound annual rate in the high single digits or low double digits overall -faster in the most promising fields. Healthcare providers are adopting molecular testing more routinely to evaluate and monitor patients for cancer, infectious diseases and other conditions, taking advantage of the superior accuracy and speed of molecular diagnostics. In addition to use of centralized laboratories, hospitals are adopting on-site analysis of molecular tests for quick, accurate results. Efficient automated workflows and standardized test kits are adding scale and reducing costs, while reimbursement practices continue to evolve. NGS also is moving into healthcare, a change that requires easy-to-use technologies, regulatory approvals and decision-support software to transform genomic data into actionable insights.

In Academia and the Pharma industry, novel sample and sequencing technologies are expanding discovery of disease pathways and biomarkers, as well as providing valuable data in drug development and clinical trials. Use of molecular testing also is expanding for protection of public safety in forensics, food supply chains and environmental monitoring.

Venlo, the Netherlands, April 6, 2017

QIAGEN N.V.

Peer M. Schatz  
Chief Executive Officer

Roland Sackers  
Chief Financial Officer



## **Corporate Governance Report**

We recognize the importance of clear and straightforward rules on corporate governance and, where appropriate, have adapted our internal organization and processes to these rules. This section provides an overview of QIAGEN's corporate governance structure and includes details of the information required under the Dutch Corporate Governance Code (the Dutch Code). The Dutch Code is applicable to QIAGEN N.V. (in the following also referred to as the "Company"), as it is a publicly listed company incorporated under the laws of The Netherlands with a registered seat in Venlo, The Netherlands. The Dutch Code contains the principles and concrete provisions which the persons involved in a listed company (including Managing Board members and Supervisory Board members) and stakeholders should observe in relation to one another.

Our corporate governance practices generally derive from the provisions of the Dutch Civil Code and the Dutch Corporate Governance Code. Further, due to our listing on the NASDAQ exchange in the U.S., the Managing Board and the Supervisory Board of QIAGEN N.V. declared their intention to disclose in QIAGEN's Annual Reports the Company's compliance with the corporate governance practices followed by U.S. companies under the NASDAQ listing standards or state the deviations recorded in the period.

A brief summary of the principal differences follows.

### **Corporate Structure**

QIAGEN is a 'Naamloze Vennootschap,' or N.V., a Dutch limited liability company similar to a corporation in the United States. QIAGEN has a two-tier board structure. QIAGEN is managed by a Managing Board consisting of executive management acting under the supervision of a Supervisory Board (non-executives), similar to a Board of Directors in a U.S. corporation. It is in the interest of QIAGEN and all its stakeholders that each Board performs its functions appropriately and that there is a clear division of responsibilities between the Managing Board, the Supervisory Board, the general meeting of shareholders (General Meeting) and the external auditor in a well-functioning system of checks and balances.

### **Managing Board**

#### **General**

The Managing Board manages QIAGEN and is responsible for defining and achieving QIAGEN's aims, strategy, policies and results. The Managing Board is also responsible for complying with all relevant legislation and regulations as well as for managing the risks associated with the business activities and the financing of QIAGEN. It reports related developments to and discusses the internal risk management and control systems with the Supervisory Board and the Audit Committee. The Managing Board is accountable for the performance of its duties to the Supervisory Board and the General Meeting of Shareholders (General Meeting). The Managing Board provides the Supervisory Board with timely information necessary for the exercise of the duties of the Supervisory Board. In discharging its duties, the Managing Board takes into account the interests of QIAGEN, its enterprises and all parties involved in QIAGEN, including shareholders and other stakeholders.

#### **Composition and Appointment**

The Managing Board consists of one or more members as determined by the Supervisory Board. The members of the Managing Board are appointed by the General Meeting upon the joint meeting of the Supervisory Board and the Managing Board (the Joint Meeting) having made a binding nomination for each vacancy. However, the General Meeting may at all times overrule the binding nature of such a nomination by a resolution adopted by at least a two-thirds majority of the votes cast, if such majority represents more than half the issued share capital. Managing Directors are appointed annually for the period beginning on the date following the Annual General Meeting up to and including the date of the Annual General Meeting held in the following year.

Members of the Managing Board may be suspended and dismissed by the General Meeting by a resolution adopted by a two-thirds majority of the votes cast, if such majority represents more than half of the issued share capital, unless the proposal was made by the Joint Meeting, in which case a simple majority of votes cast is sufficient. Furthermore, the Supervisory Board may at any time suspend (but not dismiss) a member of the Managing Board.

Our Managing Directors for the year ended December 31, 2016 and their ages as of January 31, 2017, are as follows:

## Managing Directors:

| <u>Name</u>    | <u>Age</u> | <u>Position</u>                            |
|----------------|------------|--------------------------------------------|
| Peer M. Schatz | 51         | Managing Director, Chief Executive Officer |
| Roland Sackers | 48         | Managing Director, Chief Financial Officer |

The following is a brief summary of the background of each of the Managing Directors. References to “QIAGEN” and the “Company” in relation to periods prior to April 29, 1996 mean QIAGEN GmbH and its consolidated subsidiaries:

**Peer M. Schatz**, 51, joined QIAGEN in 1993, when the Company had just 30 employees and revenues of approximately \$2 million, and has been Chief Executive Officer since January 1, 2004. He was Chief Financial Officer between 1993 and 2003 and became a member of the Managing Board in 1998. Mr. Schatz was previously a partner in a private management buyout group in Switzerland, worked in finance and systems positions in Sandoz, Ltd. and Computerland AG, and participated in the founding of start-up companies in the computer and software trading industry in Europe and the United States. Mr. Schatz graduated from the University of St. Gallen, Switzerland, with a Master's degree in Finance in 1989 and obtained an M.B.A. in Finance from the University of Chicago Graduate School of Business in 1991. Mr. Schatz served as a member of the German Corporate Governance Commission from 2002 to 2012. He is Managing Director of PS Capital Management GmbH. He is a board member of AdvaMedDx, an advocacy dedicated to issues facing the in vitro diagnostics industry in the United States and Europe, and ALDA (the Analytical, Life Science and Diagnostics Association), a trade association of developers and suppliers in these fields.

**Roland Sackers**, 48, joined the Company in 1999 as Vice President Finance and has been Chief Financial Officer since 2004. In 2006, Mr. Sackers became a member of the Managing Board. Between 1995 and 1999, he served as an auditor with Arthur Andersen Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft. Mr. Sackers earned his Master Degree Business Administration (Diplom-Kaufmann) from University of Münster, Germany. He is a former member of the Supervisory Board and Audit Committee of IBS AG and a former member of the board of directors of Operon Biotechnologies, Inc. Mr. Sackers is a board member of the industry association BIO Deutschland. He is also a non-executive director and chair of the audit committee of Immunodiagnostic Systems Holding PLC (IDS), a leading producer of immunological tests for research and diagnostic applications publicly listed in the United Kingdom.

## Conflicts of Interest, Loans or Similar Benefits

Resolutions to enter into transactions under which members of the Managing Board could have a conflict of interest with QIAGEN, and which are of material significance to QIAGEN and/or the relevant member of the Managing Board, require the approval of the Supervisory Board. A Managing Director that has a personal conflict of interest will not participate in the decision making process regarding such item. QIAGEN has not entered into any such transactions in 2016. No credit, loans or similar benefits were granted to members of the Managing Board. Additionally, the Managing Board Members did not receive any benefits from third parties that were either promised or granted in view of their position as members of the Managing Board.

## Supervisory Board

### General

The Supervisory Board supervises the policies of the Managing Board, the general course of QIAGEN's affairs and strategy and the business enterprises which we operate. The Supervisory Board assists the Managing Board by providing advice relating to the business activities of QIAGEN. In 2016, the Supervisory Board had five regular meetings that were held with the attendance of the Managing Board, while certain agenda items were discussed exclusively between the Supervisory Board members. In discharging its duties, the Supervisory Board takes into account the interests of QIAGEN, its enterprise and all parties involved in QIAGEN, including shareholders and other stakeholders. The Supervisory Board is responsible for the quality of its own performance. In this respect, the Supervisory Board conducts a self-evaluation on an annual basis. Our Supervisory Board has specified matters requiring its approval, including decisions and actions which would fundamentally change the company's assets, financial position or results of operations. The Supervisory Board has appointed an Audit Committee, a Compensation Committee, a Selection and Appointment (Nomination) Committee and a Science and Technology Committee from among its members and can appoint other committees as deemed beneficial. The Supervisory Board has approved charters pursuant to which each of the committees operates.

### Composition and Appointment

The Supervisory Board consists of at least three members, or a larger number as determined by the Joint Meeting. Members of the Supervisory Board are appointed by the General Meeting upon the Joint Meeting having made a binding nomination for each vacancy. However, the General Meeting may at all times overrule the binding nature of such a nomination by a resolution adopted by at least a two-thirds majority of the votes cast, if such majority represents more than half the issued share capital.

The Supervisory Board shall be composed in a way that enables it to carry out its duties properly and enables its members to act critically and independently of one another and of the Managing Board and any particular interests. To that effect, the Supervisory Board has adopted a profile of its size and composition that takes into account the nature of our business, our activities and the desired expertise and background of the members of the Supervisory Board. The current profile of the Supervisory Board can be found on our website. The Supervisory Board has appointed a chairman from its members who has the duties assigned to him by the Articles of Association and the Dutch Code.

Members of the Supervisory Board are appointed annually for the period beginning on the date following the General Meeting up to and including the date of the General Meeting held in the following year. Members of the Supervisory Board may be suspended and dismissed by the General Meeting by a resolution adopted by a two-thirds majority of the votes cast, if such majority represents more than half of the issued share capital, unless the proposal was made by the Managing Board and the Supervisory Board in which case a simple majority of votes cast is sufficient.

Our Supervisory Directors for the year ended December 31, 2016 and their ages as of January 31, 2017, are as follows:

#### Supervisory Directors:

| <u>Name</u> <sup>(1)</sup> | <u>Age</u> | <u>Position</u>                                                                                                                                                                                        |
|----------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stéphane Bancel            | 44         | Supervisory Director, Member of the Compensation Committee, Audit Committee and Science and Technology Committee                                                                                       |
| Dr. Metin Colpan           | 62         | Supervisory Director, Chairman of the Science and Technology Committee and Member of the Selection and Appointment Committee                                                                           |
| Prof. Dr. Manfred Karobath | 76         | Chairman of the Supervisory Board, Supervisory Director, Chairman of the Selection and Appointment Committee, Member of the Compensation Committee, and Member of the Science and Technology Committee |
| Prof. Dr. Ross L. Levine   | 45         | Supervisory Director and Member of the Science and Technology Committee                                                                                                                                |
| Prof. Dr. Elaine Mardis    | 54         | Supervisory Director and Member of the Science and Technology Committee                                                                                                                                |
| Lawrence A. Rosen          | 59         | Supervisory Director and Chairman of the Audit Committee                                                                                                                                               |
| Elizabeth E. Tallett       | 67         | Supervisory Director, Chairwoman of the Compensation Committee, Member of the Audit Committee and Member of the Selection and Appointment Committee                                                    |

(1) Dr. Werner Brandt was a member of the Supervisory Board since 2007 and did not stand for re-election at the Company's Annual General Meeting in June 2016.

The following is a brief summary of the background of each of the Supervisory Directors and Managing Directors. References to “QIAGEN” and the “Company” in relation to periods prior to April 29, 1996 mean QIAGEN GmbH and its consolidated subsidiaries:

**Stéphane Bancel**, 44, joined the Company's Supervisory Board as well as the Compensation Committee in 2013 and joined the Audit Committee and Science and Technology Committee in 2014. He is Chief Executive Officer of Moderna Therapeutics, Inc., a clinical-stage biotechnology company based in Cambridge, Massachusetts, which is advancing multiple drug development programs involving messenger RNA therapeutics. Before joining Moderna, Mr. Bancel served for five years as Chief Executive Officer of the French diagnostics company bioMérieux SA. Prior to bioMérieux, he was Managing Director of Eli Lilly in Belgium and Executive Director of Global Manufacturing Strategy and Supply Chain at Eli Lilly in Indianapolis, Indiana, after having started at Lilly in Great Britain. Before joining Eli Lilly, Mr. Bancel served as Asia-Pacific Sales and Marketing Director for bioMérieux while based in Tokyo, Japan. He holds a Master of Engineering degree from École Centrale Paris (ECP), a Master of Science in Chemical Engineering from the University of Minnesota and an M.B.A. from Harvard Business School.

**Dr. Metin Colpan**, 62, is a co-founder of QIAGEN and was the Company's Chief Executive Officer and a Managing Director from 1985 through 2003. Dr. Colpan has been a member of the Supervisory Board since 2004 and has served as Chairman of the Science and Technology Committee since 2014. He has been a member of the Selection and Appointment Committee since 2015. Dr. Colpan obtained his Ph.D. and M.S. in Organic Chemistry and Chemical Engineering from the Darmstadt Institute of Technology in 1983. Prior to founding QIAGEN, Dr. Colpan was an Assistant Investigator at the Institute for Biophysics at the University of Düsseldorf. Dr. Colpan has had wide experience in separation techniques and in the separation and purification of nucleic acids in particular, and has filed many patents in the field. Dr. Colpan also serves as a Supervisory Board member of Qalovis Farmer Automatic Energy GmbH, Laer, Germany. Dr. Colpan previously served as a Supervisory Board member of Ingenium Pharmaceuticals AG, GenPat77 Pharmacogenetics AG, GPC Biotech AG and Morphosys AG, each in Munich, Germany.

**Professor Dr. Manfred Karobath**, 76, has been a member of the Supervisory Board since 2000 and joined the Compensation Committee in 2005. In 2016, Prof. Karobath was appointed as Chairman of the Supervisory Board. He has served as a member of our Science and Technology Committee from 2014 to 2016 and joined the Compensation Committee in 2016. He is also the Chairman of the Selection and Appointment Committee. Prof. Dr. Karobath studied medicine, and from 1967 to 1980 he worked first in the Dept. of Biochemistry of the University of Vienna and, after a stage as postdoctoral fellow, he joined the Dept. of Psychiatry where he became Professor of Biological Psychiatry. In 1980, he joined Sandoz Pharma in Basel, first in drug discovery, and later becoming Senior Vice President and head of R&D. In 1992, Prof. Dr. Karobath joined Rhone Poulenc Rorer (RPR) as President of R&D and Executive Vice President, and later, he became a member of the boards of directors of RPR, Pasteur Mérieux Connought, Centeon and Rhone Poulenc Pharma. He has received several scientific awards and has published 92 scientific papers.

**Professor Dr. Ross L. Levine**, 45, joined the Supervisory Board and its Science and Technology Committee in 2016. He is a physician-scientist focused on researching and treating blood and bone marrow cancers as the Laurence Joseph Dineen Chair in Leukemia Research, the Director of the Center for Hematologic Malignancies, and an Attending Physician at Memorial Sloan Kettering Cancer Center, as well as Professor of Medicine at Weill Cornell Medical College. He leads a research lab investigating genetics and targeted therapies in myeloid malignancies and is interested in application of next-generation sequencing technology in the practice of medicine in hematologic cancers. He trained in internal medicine at Massachusetts General Hospital and in hematology-oncology at the Dana-Farber Cancer Institute, earning board certification in these specialties. He received his M.D. from the Johns Hopkins University School of Medicine and his A.B. degree from Harvard College.

**Professor Dr. Elaine Mardis**, 54, joined the Company's Supervisory Board and its Science and Technology Committee in 2014. Dr. Mardis is the Co-Executive Director of the Institute for Genomic Medicine at Nationwide Children's Hospital in Columbus, OH. She also is Professor of Pediatrics at the Ohio State University College of Medicine. Prof. Dr. Mardis has research interests in the application of genomic technologies to improving our understanding of human disease, and toward improving the precision of medical diagnosis, prognosis and treatment. Prof. Dr. Mardis is the former Robert E. and Louise F. Dunn Distinguished Professor of Medicine at Washington University School of Medicine in St. Louis, MO, where she was on the faculty for 22 years. As Co-Director of the McDonnell Genome Institute, she devised methods and automation that contributed to the Human Genome Project and has since played key roles in the 1000 Genomes Project, The Cancer Genome Atlas, and the Pediatric Cancer Genome Project. Prior to joining the Washington University faculty, she was a senior research scientist at BioRad Laboratories in Hercules, CA. Prof. Dr. Mardis is a board member of the American Association for Cancer Research, and has scientific advisory roles at the Regeneron Genomics Center, Caperna LLC, and Interpreta LLC. She also serves the U.S. government as a scientific advisor to the Veteran's Administration for the Million Veterans Program. Prof. Dr. Mardis received her Bachelor of Science degree in Zoology in 1984 and her Ph.D. in Chemistry and Biochemistry in 1989, both from the University of Oklahoma.

**Lawrence A. Rosen**, 59, joined the Company's Supervisory Board as well as the Audit Committee in 2013 and has served as the committee's chairman since 2014. Mr. Rosen was a member of the Board of Management and Chief Financial Officer of Deutsche Post DHL until September 2016. Holding this position since 2009, Mr. Rosen was in charge of controlling, corporate accounting and reporting, investor relations, corporate finance, corporate internal audit and security, taxes, as well as the group's global business services. Prior to joining Deutsche Post DHL, Mr. Rosen served as Chief Financial Officer of Fresenius Medical Care AG & Co. KGaA in Germany from 2003 to 2009. Prior to that, he was Senior Vice President and Treasurer for Aventis SA in Strasbourg, France. Between 1984 and 2000, Mr. Rosen held different positions at the Aventis predecessor companies Hoechst AG and American Hoechst/Hoechst Celanese Inc. Mr. Rosen, who is a U.S. citizen, holds a Bachelor in Business Administration from the State University of New York and an M.B.A. from the University of Michigan.

**Elizabeth E. Tallett**, 67, joined the Company's Supervisory Board as well as the Audit Committee and Compensation Committee in 2011 and since 2016 has served as Chairwoman of the Compensation Committee. Ms. Tallett was a Principal of Hunter Partners, LLC, a management company for early to mid-stage pharmaceutical, biotechnology and medical device companies, from 2002 until February 2015. Ms. Tallett continues to consult with early stage health care companies. Her senior management experience includes President and CEO of Transcell Technologies Inc., President of Centocor Pharmaceuticals, member of the Parke-Davis Executive Committee, and Director of Worldwide Strategic Planning for Warner-Lambert Company. Ms. Tallett graduated from Nottingham University, England with dual Bachelor's degrees with honors in mathematics and economics. She is a member of the board of directors of Principal Financial Group, Inc. (where she is currently the Lead Director), Anthem, Inc. and Meredith Corp. She is a former director of Varian, Inc., Immunicon, Inc., Varian Semiconductor Equipment Associates, Inc., Coventry Health Care, Inc. and IntegraMed America, Inc. Ms. Tallett was a founding board member of the Biotechnology Council of New Jersey and is a Trustee of Solebury School in Pennsylvania.

**Dr. Werner Brandt**, 63, joined the Company's Supervisory Board in 2007 and was Chairman of the Supervisory Board until June 2016. He was also Chairman of the Selection and Appointment Committee, and he served from 2007 to 2014 as Chairman of the Audit Committee. Dr. Brandt was a member of the Executive Board and the Chief Financial Officer of SAP SE from

2001 until his retirement from SAP in 2014. For some years from 2010 onwards he also held the position of Labor Relations Director. From 1999 to 2001, he was a member of the Executive Board and Chief Financial Officer of the German-American healthcare company, Fresenius Medical Care AG, where he also served as Labor Relations Director. From 1992 to 1999, Dr. Brandt was a member of the Managing Board of Baxter Deutschland GmbH and Vice President for European Operations. Dr. Brandt began his career in 1981 at the former Price Waterhouse GmbH (now PricewaterhouseCoopers) in Frankfurt. Dr. Brandt completed his doctorate in business administration from the Technical University of Darmstadt, Germany in 1991, after studying business administration at the University of Nuremberg-Erlangen, Germany from 1976 to 1981. During his time on the Supervisory Board, Dr. Brandt was also currently Chairman of the Supervisory Board of ProSiebenSat.1 Media AG, a member of the Supervisory Board of Deutsche Lufthansa AG, a member of the Supervisory Board of RWE AG and a member of the Supervisory Board of OSRAM Licht AG (where he is Chairman of the Audit Committee). Dr. Werner Brandt did not stand for re-election at the Company's Annual General Meeting in June 2016.

### Conflicts of Interest, Loans or Similar Benefits

Resolutions to enter into transactions under which members of the Supervisory Board could have a conflict of interest with QIAGEN, and which are of material significance to QIAGEN and/or the relevant member of the Supervisory Board, require the approval of the Supervisory Board plenum. A Supervisory Director that has a personal conflict of interest will not participate in the decision making process regarding such item. In 2016, neither QIAGEN nor its Supervisory Board members have entered into any such transactions. No credit, loans or similar benefits were granted to members of the Supervisory Board. Additionally, the Supervisory Board Members did not receive any benefits from third parties that were either promised or granted in view of their position as members of the Supervisory Board.

### Committees of the Supervisory Board

The Supervisory Board has established an Audit Committee, a Compensation Committee, a Selection and Appointment Committee and a Science and Technology Committee from among its members and can establish other committees as deemed beneficial. The Supervisory Board has approved charters under which each of the committees operates. These charters are published on our website [www.qiagen.com](http://www.qiagen.com). The committees are comprised of the following members:

| <b><u>Name of Supervisory Director</u></b> <sup>(1)</sup> | <b>Member of Audit Committee</b> | <b>Member of Compensation Committee</b> | <b>Member of Selection and Appointment Committee</b> | <b>Member of Science and Technology Committee</b> |
|-----------------------------------------------------------|----------------------------------|-----------------------------------------|------------------------------------------------------|---------------------------------------------------|
| Stéphane Bancel                                           | •                                | •                                       |                                                      | •                                                 |
| Dr. Metin Colpan                                          |                                  |                                         | •                                                    | •<br>(Chairman)                                   |
| Prof. Dr. Manfred Karobath                                |                                  | •                                       | •<br>(Chairman)                                      | •                                                 |
| Prof. Dr. Ross L. Levine                                  |                                  |                                         |                                                      | •                                                 |
| Prof. Dr. Elaine Mardis                                   |                                  |                                         |                                                      | •                                                 |
| Lawrence A. Rosen                                         | •<br>(Chairman)                  |                                         |                                                      |                                                   |
| Elizabeth E. Tallett                                      | •                                | •<br>(Chairwoman)                       | •                                                    |                                                   |

(1) Dr. Werner Brandt served as the Chairman of the Selection and Appointment Committee until June 2016.

We believe that all of our Supervisory Directors meet the independence requirements set forth in the Dutch Corporate Governance Code (the Dutch Code). We further believe that all Supervisory Board Directors qualify as independent under the Marketplace Rules of the NASDAQ Stock Market. Pursuant to the NASDAQ rules, a majority of the Supervisory Directors must qualify as independent, as defined in the Rules.

### Audit Committee

The Audit Committee currently consists of three members, Mr. Rosen (Chairman), Ms. Tallett and Mr. Bancel, and meets at least quarterly. The Audit Committee members are appointed by the Supervisory Board and serve for a term of one year. We believe that all members of our Audit Committee meet the independence requirements as set forth in Rule 10A-3 of the Securities Exchange Act of 1934, as amended, and the Marketplace Rules of the NASDAQ. The Board has designated Mr.

Rosen as an “audit committee financial expert” as that term is defined in the United States Securities and Exchange Commission rules adopted pursuant to the Sarbanes-Oxley Act of 2002 and as defined in provisions III.3.2 and III.5.7 of the Dutch Code. The Audit Committee performs a self-evaluation of its activities on an annual basis.

The Audit Committee's primary duties and responsibilities include, among other things, to serve as an independent and objective party to monitor QIAGEN's accounting and financial reporting process and internal risk management, control and compliance systems. The Audit Committee also is directly responsible for proposing the external auditor to the Supervisory Board, which then proposes the appointment of the external auditor to the General Meeting. Further, the Audit Committee is responsible for the compensation and oversight of QIAGEN's external auditor and for providing an open avenue of communication among the external auditor as well as the Management Board and the Supervisory Board. Our Internal Audit department operates under the direct responsibility of the Audit Committee. Further, the Audit Committee is responsible to establish procedures to allow for the confidential and or anonymous submission by employees of concerns. Additionally, this includes the receipt, retention and treatment of submissions received regarding accounting, internal accounting controls, or auditing matters. The Audit Committee discusses our financial accounting and reporting principles and policies and the adequacy of our internal accounting, financial and operating controls and procedures with the external auditor and management; considers and approves any recommendations regarding changes to our accounting policies and processes; reviews with management and the external auditor our quarterly earnings reports prior to their release to the press; and reviews the quarterly and annual reports (reported on Forms 6-K and 20-F) to be furnished to or filed with the Securities and Exchange Commission and the Deutsche Boerse. The Audit Committee met seven times in 2016 and met with the external auditor excluding members of the Managing Board in December 2016. The Audit Committee reviews major financial risk exposures, pre-approves related-party transactions, and reviews any legal matter including compliance topics that could have a significant impact on the financial statements.

### **Compensation Committee**

The Compensation Committee's primary duties and responsibilities include, among other things, the preparation of a proposal for the Supervisory Board concerning the Remuneration Policy for the Managing Board to be adopted by the General Meeting, the preparation of a proposal concerning the individual compensation of Managing Board members to be adopted by the Supervisory Board and the preparation of the Remuneration Report on compensation policies for the Managing Board to be adopted by the Supervisory Board. The Compensation Committee reviews and approves all equity-based compensation, reviews and approves the annual salaries, bonuses and other benefits of executive officers, and reviews general policies relating to employee compensation and benefits. The Remuneration Report reviews the implementation of the Remuneration Policy in the most recent year and provides an outline of the Remuneration Policy for the future. The Compensation Committee currently consists of three members, Ms. Tallett (Chairwoman), Professor Karobath and Mr. Bancel. Members are appointed by the Supervisory Board and serve for a term of one year. The Compensation Committee met seven times in 2016.

### **Selection and Appointment Committee**

The Selection and Appointment (Nomination) Committee is primarily responsible for the preparation of selection criteria and appointment procedures for members of the Supervisory Board and Managing Board as well as the periodic evaluation of the scope and composition of the Managing Board and the Supervisory Board, including the profile of the Supervisory Board. Additionally, the Selection and Appointment Committee periodically evaluates the functioning of individual members of the Managing Board and Supervisory Board, reporting these results to our Supervisory Board. It also proposes the (re-) appointments of members of our Managing Board and Supervisory Board and supervises the policy of our Managing Board in relation to selection and appointment criteria for senior management. Current members of the Selection and Appointment Committee are Professor Karobath (Chairman), Dr. Colpan and Ms. Tallett. Members are appointed by the Supervisory Board and serve for a one-year term. The Selection and Appointment Committee met one time in 2016.

### **Science and Technology Committee**

The Science and Technology Committee is primarily responsible for reviewing and monitoring research and development projects, programs, budgets, infrastructure management and overseeing the management risks related to the Company's portfolio and information technology platforms. The Science and Technology Committee provides understanding, clarification and validation of the fundamental technical basis of the Company's businesses in order to enable the Supervisory Board to make informed, strategic business decisions and vote on related matters, and to guide the Managing Board to ensure that powerful, global, world-class science is developed, practiced and leveraged throughout the Company to create shareholder value. The current members of the Science and Technology Committee are Dr. Colpan (Chairman), Professor Karobath, Professor Levine, Mr. Bancel and Professor Mardis. Members are appointed by the Supervisory Board and serve for a term of one year. The Science and Technology Committee met four times in 2016.

### **Diversity policy**

The Dutch government emphasizes the importance for companies to pursue a diversity policy. QIAGEN recognizes the benefits of diversity, including gender balance. However, QIAGEN feels that gender is only one part of diversity and aims to have members in the Managing Board and Supervisory Board with different experiences. QIAGEN's Selection and Appointment committee will continue selecting future members of the Managing Board and Supervisory Board on the basis of wide ranging experience, backgrounds, skills, knowledge and insight.

## **Compensation of Managing Board Members and Supervisory Directors**

### *Remuneration policy*

The objective of our remuneration policy is to attract and retain the talented, highly qualified international leaders and skilled individuals, who enable QIAGEN to achieve its short and long-term strategic initiatives and operational excellence. Our remuneration policy aligns remuneration with individual performance, corporate performance and fosters sustainable growth and long-term value creation in the context of QIAGEN's social responsibility and stakeholders' interest.

The remuneration policy and overall remuneration levels are benchmarked regularly, against a selected group of companies and key markets in which QIAGEN operates, to ensure overall competitiveness. QIAGEN participates in various compensation benchmarking surveys that provide information on the level, as well as the structure, of compensation awarded by various companies and industries for a broad range of positions around the world. The companies in the peer group are selected on the basis of market capitalization, competitors for talent, similar complexity and international spread, operating in similar industries.

The performance of the Managing Board members is measured annually against a written set of goals. The remuneration of the Managing Board members is linked to the achievement of QIAGEN's strategic and financial goals. To ensure that remuneration is linked to performance, a significant proportion of the remuneration package is variable and contingent on performance of the individual and the company. These goals are set at ambitious levels each year to motivate and drive performance, with a focus on achieving both long-term strategic initiatives and short-term objectives based on the annual operative planning. Performance metrics used for these goals include the achievement of financial and non-financial targets.

The remuneration package of the Managing Board members consists of a combination of base salary, short term variable cash award and several elements of long term incentives (together, 'total direct compensation'). In addition, the members of the Managing Board receive a pension arrangement and other benefits that are standard in our industry, such as a company car.

The total target remuneration package of the Managing Board members is appropriately set against a variety of factors which includes external and internal equity, experience, complexity of the position, scope and responsibilities. We aim to provide the members of the Managing Board a total direct compensation at market median level.

The structure of the remuneration package for the Managing Board is designed to balance short-term operational excellence with long-term sustainable value creation while taking into account the interests of its stakeholders. As such a significant part of the total remuneration of the Managing Board members consist of variable remuneration which can differ substantially from year to year depending on our corporate results and individual performance and may include equity-based compensation which may be subject to vesting conditions over a period of 10 years.

The remuneration policies for the Managing Board and for other senior management members of QIAGEN are generally aligned and consistent.

### *Managing Board compensation*

The compensation granted to the members of the Managing Board in 2016 consisted of a fixed salary and variable components, with the significant majority of compensation awarded in the form of QIAGEN stock units that are restricted for a long multi-year period to align management with the interests of shareholders and other stakeholders. Variable compensation included annual payments linked to business performance (annual bonus), as well as long-term equity incentives that were awarded based on individual performance.

In 2014, the General Meeting of Shareholders approved a new remuneration policy for the Managing Board which provides that future annual regular equity-based compensation grants to members of the Managing Board will primarily consist of performance stock units. Grants of stock options and restricted stock units which are based on time vesting only shall no longer be granted on a regular basis and shall be reserved for use as special equity incentive rewards in certain situations.

Stock options granted to the Managing Board members must have an exercise price that is higher than the market price at the time of grant. Restricted Stock Units granted to the Managing Board members, vest over a 10-year period. Performance Stock Units are subject to long-term vesting periods and contingent upon the achievement of several financial goals over a multi-year period.

In 2013, QIAGEN issued Performance Stock Units that are directly linked with the future achievement of QIAGEN's five-year business plan as well as implemented mandatory minimum holding levels of QIAGEN shares for a group of approximately 50

managers. This program is referred to as the "Commitment Program". The financial targets for vesting of these Performance Stock Units were based on three-year goals as defined within QIAGEN's five-year business plan covering the period from 2014 until the end of 2016. The targets for vesting were set and approved by the Supervisory Board, and they consist of specific quantitative goals for net sales, earnings before interest and taxes (EBIT), return on invested capital (ROIC) and QIAGEN Value Added (QVA), a steering metric that measures the ability of QIAGEN to generate returns and exceed its cost of capital. Achievement of these 2013 Performance Stock Units was finalized as of December 31, 2016 at 20%. In 2016, a new grant of Performance Stock Units with mandatory minimum holding levels of QIAGEN shares was made under the Commitment Program linked to achievement of a two-year plan covering 2017 and 2018 including quantitative goals for net sales, EBIT, QVA and share price development as compared to peer companies.

The table below states the amounts earned on an accrual basis by our Managing Board members in 2016.

| <b>For the year ended December 31, 2016 (in US\$ thousands, except for number of award grants)</b> | <b>Peer M. Schatz</b> | <b>Roland Sackers</b> |
|----------------------------------------------------------------------------------------------------|-----------------------|-----------------------|
| Fixed Salary                                                                                       | \$ 1,146              | \$ 514                |
| Other <sup>(5)</sup>                                                                               | 12                    | 37                    |
| <b>Total fixed income 2016</b>                                                                     | <b>\$ 1,158</b>       | <b>\$ 551</b>         |
| Short-term variable cash bonus <sup>(1)</sup>                                                      | 165                   | 53                    |
| <b>Total short-term income 2016</b>                                                                | <b>\$ 1,323</b>       | <b>\$ 604</b>         |
| Defined contribution on benefit plan                                                               | \$ 72                 | \$ 74                 |
| <i>Number of restricted stock units granted 2016<sup>(4)</sup></i>                                 | <i>21,081</i>         | <i>7,153</i>          |
| Related recognized compensation expense                                                            | \$ 286                | \$ 97                 |
| <i>Number of performance stock units granted 2016 <sup>(2, 3)</sup></i>                            | <i>791,869</i>        | <i>229,383</i>        |
| Related recognized compensation expense                                                            | \$ 1,809              | \$ 421                |

- (1) The Variable Cash Bonus amount does not include values which were converted to equity-based compensation.
- (2) The Performance Stock Units Granted amount includes the number of Performance Stock Units granted to each Managing Board member at his election in lieu of the value of the cash bonus earned by such Managing Board member in 2016. These performance stock units vest over two years from the grant date. In 2016, Mr. Schatz received a grant of 27,677 performance stock units and Mr. Sackers received a grant of 8,884 performance stock units. These 2016 performance grants were achieved at 90% of the targeted vesting amount.
- (3) The Performance Stock Units Granted amount includes the number of Performance Stock Units granted to each Managing Board member under the Company's Commitment Program. In 2016, Mr. Schatz received a grant of 460,220 performance stock units and Mr. Sackers received a grant of 144,809 performance stock units.
- (4) In lieu of cash bonus, each Managing Board member elected to receive the value earned in 2015 in restricted stock units which vest over two years from the grant date. In 2016, Mr. Schatz received a grant of 21,081 restricted stock units and Mr. Sackers received a grant of 7,153 restricted stock units.
- (5) Amounts include, among others, car lease and reimbursed personal expenses such as tax consulting. We also occasionally reimburse our Managing Directors' personal expenses related to attending out-of-town meetings but not directly related to their attendance. Amounts do not include the reimbursement of certain expenses relating to travel incurred at the request of QIAGEN, other reimbursements or payments that in total did not exceed \$10,000 or tax amounts paid by the Company to tax authorities in order to avoid double-taxation under multi-tax jurisdiction employment agreements.

The total recognized compensation expense in accordance with IFRS 2 in the year 2016 (2015) for stock options and stock units including recognized expenses for equity awards granted in previous years as well as for any non-periodical share-based payments in kind of a bonus amounted to \$9.2 million (\$6.2 million) for Mr. Schatz and \$2.7 million (\$1.9 million) for Mr. Sackers.

Based on such valuations the total compensation including recognized compensation expenses in the year 2016 (2015) for members of the Managing Board was \$14.0 million (\$10.1 million), and amounts \$10.6 million (\$7.5 million) for Mr. Schatz and \$3.4 million (\$2.6 million) for Mr. Sackers. Total non-periodical remuneration according Dutch Civil Code included in total compensation was \$2.8 million (\$2.0 million) and amounts \$2.3 million (\$1.5 million) for Mr. Schatz and \$0.6 million (\$0.5 million) for Mr. Sackers.

Further details on the composition of remuneration for the Managing Board, and the implementation of the Remuneration Policy during 2016, are disclosed in the Remuneration Report of the Compensation Committee as published on our website at [www.qiagen.com](http://www.qiagen.com).

#### *Supervisory Board compensation*

In early 2014, we conducted a board remuneration benchmark review of 36 peer companies of similar size and complexity in similar industries, including biotechnology, life science supplies, diagnostics and pharmaceuticals. Based on the results of this

review, the Supervisory Board remuneration was aligned to the applicable market standards to reflect our nexus to the European Markets as a Dutch company as well as our U.S. focus as a NASDAQ listed company subject to U.S. regulations and the fact that three of the seven Supervisory Board members are residing in the United States.

The Supervisory Board compensation for 2016 consists of fixed retainer compensation and additional retainer amounts for Chairman and Vice Chairman. Annual remuneration of the Supervisory Board members is as follows:

|                                                                                                  |           |
|--------------------------------------------------------------------------------------------------|-----------|
| Fee payable to the Chairman of the Supervisory Board                                             | \$150,000 |
| Fee payable to the Vice Chairman of the Supervisory Board                                        | \$90,000  |
| Fee payable to each member of the Supervisory Board                                              | \$57,500  |
| Additional compensation payable to members holding the following positions:                      |           |
| Chairman of the Audit Committee                                                                  | \$25,000  |
| Chairman of the Compensation Committee                                                           | \$18,000  |
| Chairman of the Selection and Appointment Committee and other board committees                   | \$12,000  |
| Fee payable to each member of the Audit Committee                                                | \$15,000  |
| Fee payable to each member of the Compensation Committee                                         | \$11,000  |
| Fee payable to each member of the Selection and Appointment Committee and other board committees | \$6,000   |

Further, the Supervisory Board members will be reimbursed for tax consulting costs incurred in connection with the preparation of their tax returns up to an amount of €5,000 per person per fiscal year.

Supervisory board members also receive a variable component, in the form of share-based compensation. We did not pay any agency or advisory service fees to members of the Supervisory Board.

The following table summarizes the total compensation paid to the members of the Supervisory Board in 2016<sup>(1)</sup>:

| <b>For the year ended December 31, 2016<br/>(in US\$ thousands, except for number of<br/>share grants)</b> | <b>Fixed<br/>remuneration</b> | <b>Chairman /<br/>vice<br/>chairman<br/>committee</b> | <b>Committee<br/>membership</b> | <b>Total<sup>(2)</sup></b> | <b>Number of<br/>restricted<br/>stock units<br/>granted</b> |
|------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------|---------------------------------|----------------------------|-------------------------------------------------------------|
| Stéphane Bancel                                                                                            | \$ 57.5                       | —                                                     | 32.0                            | \$ 89.5                    | 10,742                                                      |
| Dr. Werner Brandt                                                                                          | \$ 75.0                       | 6.0                                                   | —                               | \$ 81.0                    | 10,742                                                      |
| Dr. Metin Colpan                                                                                           | \$ 57.5                       | 12.0                                                  | 6.0                             | \$ 75.5                    | 10,742                                                      |
| Prof. Dr. Manfred Karobath                                                                                 | \$ 120.0                      | 15.0                                                  | 14.5                            | \$ 149.5                   | 10,742                                                      |
| Prof. Dr. Ross L. Levine                                                                                   | \$ 28.8                       | —                                                     | 3.0                             | \$ 31.8                    | —                                                           |
| Prof. Dr. Elaine Mardis                                                                                    | \$ 57.5                       | —                                                     | 6.0                             | \$ 63.5                    | 10,742                                                      |
| Lawrence A. Rosen                                                                                          | \$ 57.5                       | 25.0                                                  | —                               | \$ 82.5                    | 10,742                                                      |
| Elizabeth E. Tallett                                                                                       | \$ 57.5                       | 9.0                                                   | 23.5                            | \$ 90.0                    | 10,742                                                      |

(1) Dr. Werner Brandt was a member of the Supervisory Board since 2007 and did not stand for re-election at the Company's Annual General Meeting in June 2016.

(2) Supervisory Directors are reimbursed for travel costs and for any value-added tax to be paid on their remuneration. These reimbursements are excluded from the amounts presented herein.

The total recognized compensation expense in accordance with IFRS 2 in the year 2016 (2015) for long-term compensation of stock options and restricted stock units including recognized expenses for equity awards granted in previous years as well as for any non-periodical share-based payments in kind of a bonus amounted to \$160.2 thousand (\$66.9 thousand) for Mr. Bancel, \$213.2 thousand (\$153.9 thousand) for Mr. Brandt, \$244.1 thousand (\$153.8 thousand) for Mr. Colpan, \$239.3 thousand (\$202.6 thousand) for Mr. Karobath, \$160.2 thousand (\$66.9 thousand) for Mr. Rosen, \$239.3 thousand (\$265.8 thousand) for Ms. Tallett, and \$92.6 thousand (\$32.1 thousand) for Ms. Mardis.

The total recognized compensation expenses for members of the Supervisory Board in 2016 (2015) for short-term and long-term compensation totaled \$2.01 million (\$1.67 million) and includes amounts of \$294.2 thousand (\$315.9 thousand) for Mr. Brandt, \$319.6 thousand (\$226.3 thousand) for Mr. Colpan, \$388.8 thousand (\$322.6 thousand) for Mr. Karobath, \$329.3

thousand (\$349.3 thousand) for Ms. Tallett, \$249.7 thousand (\$156.4 thousand) for Mr. Bancel, \$242.7 thousand (\$149.4 thousand) for Mr. Rosen, \$156.1 thousand (\$95.6 thousand) for Ms. Mardis, and \$31.7 thousand for Mr. Levine. Prof. James E. Bradner, M.D. was elected at the Company's Annual General Meeting in June 2015 and declared his resignation as of December 31, 2015. In 2015, total compensation expense recognized for Mr. Bradner was \$58.2 thousand.

Total non-periodical remuneration according Dutch Civil Code included in total compensation in 2016 (2015), which includes the expense related to the short-term variable cash bonus and the expense related to the long-term compensation of equity awards granted in 2016 (2015), totaled \$336.6 thousand (\$411.5 thousand) and includes amounts of \$14.4 thousand (\$32.1 thousand) for Mr. Brandt, \$29.4 thousand (\$32.1 thousand) for Mr. Colpan, \$102.3 thousand (\$125.5 thousand) for Mr. Karobath, \$102.3 thousand (\$125.5 thousand) for Ms. Tallett, \$29.4 thousand (\$32.1 thousand) for Mr. Rosen, \$29.4 thousand (\$32.1 thousand) for Mr. Bancel, and \$29.4 thousand (\$32.1 thousand) for Ms. Mardis.

## Share Ownership

The following table sets forth certain information as of January 31, 2017 concerning the ownership of Common Shares by our directors and officers. In preparing the following table, we have relied on information furnished by such persons.

| <u>Name and Country of Residence</u>    | <u>Shares Beneficially Owned <sup>(1)</sup></u> |                          |
|-----------------------------------------|-------------------------------------------------|--------------------------|
|                                         | <u>Number <sup>(2)</sup></u>                    | <u>Percent Ownership</u> |
| Peer M. Schatz, Germany                 | 2,046,821.92 (3)                                | 0.91%                    |
| Roland Sackers, Germany                 | 19,258.00 (4)                                   | *                        |
| Stéphane Bancel, United States          | — (5)                                           | —                        |
| Dr. Metin Colpan, Germany               | 3,523,427.00 (6)                                | 1.56%                    |
| Prof. Dr. Manfred Karobath, Austria     | 17,986.00 (7)                                   | *                        |
| Prof. Dr. Ross L. Levine, United States | —                                               | —                        |
| Prof. Dr. Elaine Mardis, United States  | —                                               | —                        |
| Lawrence A. Rosen, Germany              | — (8)                                           | —                        |
| Elizabeth Tallett, United States        | 4,854.00 (9)                                    | *                        |

\* Indicates that the person beneficially owns less than 0.5% of the Common Shares issued and outstanding as of January 31, 2017.

- (1) The number of Common Shares outstanding as of January 31, 2017 was 225,882,186.67. The persons and entities named in the table have sole voting and investment power with respect to all shares shown as beneficially owned by them and have the same voting rights as shareholders with respect to Common Shares.
- (2) Does not include Common Shares subject to options or awards held by such persons at January 31, 2017. See footnotes below for information regarding options now exercisable or that could become exercisable within 60 days of the date of this table.
- (3) Does not include 731,158 shares issuable upon the exercise of options now exercisable having exercise prices ranging from \$15.59 to \$22.43 per share. Options expire in increments during the period between February 2018 and February 2023. Does not include 1,195,512 shares issuable upon the release of unvested stock awards that could become releasable within 60 days from the date of this table.
- (4) Does not include 196,121 shares issuable upon the exercise of options now exercisable having exercise prices ranging from \$15.59 to \$22.43 per share. Options expire in increments during the period between February 2018 and February 2023. Does not include 143,644 shares issuable upon the release of unvested stock awards that could become releasable within 60 days from the date of this table.
- (5) Does not include 4,000 shares issuable upon the release of unvested stock awards that could become releasable within 60 days from the date of this table.
- (6) Does not include 9,835 shares issuable upon the exercise of options now exercisable having exercise prices ranging from \$15.59 to \$22.43 per share. Options expire in increments during the period between April 2017 and February 2022. Includes 2,741,579 shares held by CC Verwaltungs GmbH, of which Dr. Colpan is the sole stockholder and 770,370 shares held by Colpan GbR. Does not include 6,716 shares issuable upon the release of unvested stock awards that could become releasable within 60 days from the date of this table.

- (7) Does not include 9,835 shares issuable upon the exercise of options now exercisable having exercise prices ranging from \$15.59 to \$22.43 per share. Options expire in increments during the period between April 2017 and February 2022. Does not include 6,716 shares issuable upon the release of unvested stock awards that could become releasable within 60 days from the date of this table.
- (8) Does not include 4,000 shares issuable upon the release of unvested stock awards that could become releasable within 60 days from the date of this table.
- (9) Does not include 1,563 shares issuable upon the exercise of options now exercisable having exercise prices of \$15.59 per share. Options expire on February 2022. Does not include 6,716 shares issuable upon the release of unvested stock awards that could become releasable within 60 days from the date of this table.

The following table sets forth the options of our officers and directors as of January 31, 2017:

| <b>Name</b>                | <b>Total Vested Options</b> | <b>Expiration Dates</b> | <b>Exercise Prices</b> |
|----------------------------|-----------------------------|-------------------------|------------------------|
| Peer M. Schatz             | 731,158                     | 2/28/2018 to 2/28/2023  | \$15.59 to \$22.43     |
| Roland Sackers             | 196,121                     | 2/28/2018 to 2/28/2023  | \$15.59 to \$22.43     |
| Stéphane Bancel            | —                           | —                       | —                      |
| Dr. Metin Colpan           | 9,835                       | 4/25/2017 to 2/28/2022  | \$15.59 to \$22.43     |
| Prof. Dr. Manfred Karobath | 9,835                       | 4/25/2017 to 2/28/2022  | \$15.59 to \$22.43     |
| Prof. Dr. Elaine Mardis    | —                           | —                       | —                      |
| Lawrence A. Rosen          | —                           | —                       | —                      |
| Elizabeth E. Tallett       | 1,563                       | 2/28/2022               | \$15.59                |

## **Additional Information**

### **Shareholders**

Our shareholders exercise their voting rights through Annual and Extraordinary General Meetings. Resolutions of the General Meeting are adopted by an absolute majority of votes cast, unless a different majority of votes or quorum is required by Dutch law or the Articles of Association. Each common share confers the right to cast one vote.

Furthermore, the Managing Board, or where appropriate, the Supervisory Board, shall provide all shareholders and other parties in the financial markets with equal and simultaneous information about matters that may influence QIAGEN's share price.

QIAGEN is required to convene an Annual General Meeting in the Netherlands no later than six months following the end of each year. The agenda for the Annual General Meeting must contain certain matters as specified in QIAGEN's Articles of Association and under Dutch law, including, among other things, the adoption of QIAGEN's annual financial statements.

Additional Extraordinary General Meetings may be requested and/or convened at any time by the Managing Board, the Supervisory Board or by one or more shareholders jointly representing at least 40% of QIAGEN's issued share capital. Furthermore, one or more shareholders, who jointly represent at least 10% of QIAGEN's issued share capital may, on their application, be authorized by the district court judge having applications for interim relief, to convene a General Meeting. Shareholders are entitled to propose items for the agenda of the General Meeting provided that they hold at least 3% of the issued share capital. Proposals for agenda items for the General Meeting must be submitted at least 60 days prior to the meeting date. The notice convening a General Meeting, accompanied by the agenda, shall be sent no later than 42 days prior to the meeting. QIAGEN informs the General Meeting by means of explanatory notes to the agenda, providing all facts and circumstances relevant to the proposed resolutions.

Pursuant to the Dutch Code, all transactions between the company and legal or natural persons who hold at least ten percent of the shares in the company shall be agreed on terms that are customary in the sector concerned. Decisions to enter into transactions in which there are conflicts of interest with such persons that are of material significance to the company and/or to such persons require the approval of the Supervisory Board. QIAGEN has not entered into any such transactions in 2016.

### **Stock Plans**

We adopted the QIAGEN N.V. Amended and Restated 2005 Stock Plan (the 2005 Plan) which was approved by our shareholders on June 14, 2005. The 2005 Plan expired by its terms in April 2015 and no further awards will be granted under the 2005 Plan. On June 25, 2014, our shareholders approved the QIAGEN N.V. 2014 Stock Plan (the 2014 Plan), which replaced the 2005 Plan in April 2015. An aggregate of 9.1 million Common Shares were reserved for issuance pursuant to the 2014 Plan, subject to certain antidilution adjustments. We issue Treasury Shares to satisfy option exercises and award releases

and had approximately 17.9 million Common Shares reserved and available for issuance under the 2005 and 2014 Plans at December 31, 2016.

Pursuant to the 2014 Plan, stock rights, which include options to purchase our Common Shares, stock grants and stock-based awards, may be granted to employees and consultants of QIAGEN and its subsidiaries and to Supervisory Directors. Options granted pursuant to the 2014 Plan may either be incentive stock options within the meaning of Section 422 of the United States Internal Revenue Code of 1986, as amended (the Code), or non-qualified stock options. Options granted to members of the Supervisory Board and the Managing Board must have an exercise price that is higher than the market price at the time of grant. Generally, each of the options has a term of ten years, subject to earlier termination in the event of death, disability or other termination of employment. The vesting and exercisability of certain stock rights will be accelerated in the event of a Change of Control, as defined in the agreements under the 2014 Plan.

The Plan is administered by the Compensation Committee of the Supervisory Board, which selects participants from among eligible employees, consultants and directors and determines the number of shares subject to the stock-based award, the length of time the award will remain outstanding, the manner and time of the award's vesting, the price per share subject to the award and other terms and conditions of the award consistent with the Plan. The Compensation Committee's decisions are subject to the approval of the Supervisory Board.

The Compensation Committee has the power, subject to Supervisory Board approval, to interpret the plans and to adopt such rules and regulations (including the adoption of "sub plans" applicable to participants in specified jurisdictions) as it may deem necessary or appropriate. The Compensation Committee or the Supervisory Board may at any time amend the plans in any respect, subject to Supervisory Board approval, and except that (i) no amendment that would adversely affect the rights of any participant under any option previously granted may be made without such participant's consent and (ii) no amendment shall be effective prior to shareholder approval to the extent such approval is required to ensure favorable tax treatment for incentive stock options or to ensure compliance with Rule 16b-3 under the United States Securities Exchange Act of 1934, as amended (the Exchange Act) at such times as any participants are subject to Section 16 of the Exchange Act.

As of January 31, 2017, there were 1.4 million options outstanding with exercise prices ranging between \$14.26 and \$23.16 and expiring between April 25, 2017 and October 31, 2023. The exercise price of the options is the fair market value of the Common Shares as of the date of grant or a premium above fair market value. Additionally, there were 10.2 million stock unit awards outstanding as of January 31, 2017. These awards will be released between February 15, 2017 and October 31, 2026.

As of January 31, 2017, options to purchase 0.9 million Common Shares and 4.5 million stock unit awards were held by the officers and directors of QIAGEN, as a group.

Further detailed information regarding stock options and awards granted under the plan can be found in Note 20 included in the Consolidated Financial Statements.

## **Independence**

Unlike the NASDAQ listing standards which require a majority of the Supervisory Board members to be independent, the Dutch Corporate Governance Code recommends that all Supervisory Board members, with the exception of not more than one person, shall be independent within the meaning of its "best practice" provision. In some cases the Dutch independence requirement is more stringent, such as by requiring a longer "look back" period (five years) for former executive directors. In other cases, the NASDAQ rules are more stringent, such as a broader definition of disqualifying affiliations. Currently, all of our Supervisory Board are "independent" under both the NASDAQ and Dutch definitions.

## **Risk Management**

Reference is made to the discussion in the section "Principle Risks and Uncertainties" above.

## **Independent Auditors**

In accordance with the requirements of Dutch law, our independent public accounting firm for our statutory consolidated financial statements prepared in accordance with International Financial Reporting Standards and filed with the Netherlands Authority for the Financial Markets (AFM), is appointed, and may be removed by, the General Meeting. The Supervisory Board nominates a candidate for the appointment as external auditor, for which purpose both the Audit Committee and the Managing Board advise the Supervisory Board. At the Annual General Meeting in 2016, KPMG Accountants N.V. was appointed as external auditor for the Company for 2016 year. The external auditor is invited to attend the meeting of the Supervisory Board at which the statutory financial statements prepared in accordance with International Financial Reporting Standards and filed with the AFM shall be approved and is furthermore invited to attend the General Meeting at which the statutory financial statements are adopted and may be questioned by the General Meeting on its statement on the fairness of our annual accounts prepared in accordance with International Financial Reporting Standards.

At least once every four years, the Supervisory Board and the Audit Committee shall conduct a thorough assessment of the functioning of the external auditor. The main conclusions of this assessment shall be communicated to the General Meeting for the purposes of assessing the nomination for the appointment of the external auditor. The external auditor is invited to attend the meeting of the Supervisory Board at which the financial statements shall be approved and is furthermore invited to attend the General Meeting at which the financial statements are adopted and may be questioned by the General Meeting on its statement on the fairness of our annual accounts.

### **Whistleblower Policy and Code of Conduct**

We have a formal Whistleblower Policy concerning the reporting of alleged irregularities within QIAGEN of a general, operational or financial nature. Furthermore, we have a published Code of Conduct that outlines business principles for our employees and rules of conduct. The Code of Conduct can be found on our website at [www.qiagen.com](http://www.qiagen.com).

### **Anti-Takeover Measures**

In 2004, the Supervisory Board granted an option to the Dutch Foundation Stichting Preferente Aandelen QIAGEN that allows the Foundation to acquire preference shares from QIAGEN if (i) a person has (directly or indirectly) acquired or has expressed a desire to acquire more than 20% of our issued share capital, or (ii) a person holding at least a 10% interest in the share capital has been designated as a hostile person by our Supervisory Board. The option enables the Foundation to acquire preference shares equal to the number of our outstanding common shares at the time of the relevant exercise of the right, less one share. When exercising the option and exercising its voting rights on these shares, the Foundation must act in the interest of QIAGEN and the interests of our stakeholders. No preference shares are currently outstanding.

### **Dutch Corporate Governance Code - Comply or Explain**

The corporate governance structure and compliance with the Dutch Code is the joint responsibility of the Managing Board and the Supervisory Board. They are accountable for this responsibility to the General Meeting. We continue to seek ways to improve our corporate governance by measuring itself against international best practice. The Dutch Code applicable to the financial year 2016 dates from December 10, 2008, and can be found at [www.commissiecorporategovernance.nl](http://www.commissiecorporategovernance.nl). A revised Dutch Code was published on December 8, 2016 and is applicable as from January 1, 2017.

Non-application of a specific best practice provision is not in itself considered objectionable by the Dutch Code and may well be justified because of particular circumstances relevant to a company. In accordance with Dutch law, we disclose in our Annual Report the application of the Dutch Code's principles and best practice provisions.

To the extent that we do not apply certain principles and best practice provisions, or do not intend to apply these in the current or the subsequent year, we state the reasons.

We take a positive view of the Dutch Code and apply nearly all of the best practice provisions. However, we prefer not to apply some provisions due to the international character of our business as well as the fact - acknowledged by the Commission that drafted the Dutch Code - that existing contractual agreements between QIAGEN and individual members of the Managing Board cannot be set aside at will.

The following provides an overview of exceptions that we have identified:

1. *Best practice provision II.1.1 recommends that a management board member is appointed for a maximum period of four years. A member may be reappointed for a term of not more than four years at a time.*

Members of the Managing Board are appointed annually for a one-year period beginning on the day following the General Meeting up to and including the day of the General Meeting held in the following year.

2. *Best practice provision II.2.4 recommends that the number of granted options shall be dependent on the achievement of challenging targets specified beforehand.*

On June 25, 2014 the Annual General Meeting approved amendments to the remuneration policy of the Managing Board ("Remuneration Policy") which state that grants of stock options shall no longer be made on a regular basis and shall be reserved for use as special equity incentive rewards in certain situations. No stock options were granted to the members of the Managing Board in 2016.

3. *Best practice provision II.2.5 recommends that shares granted to management board members without financial consideration shall be retained for a period of at least five years or until at least at the end of the employment, if this period is shorter. The number of shares to be granted shall be dependent on the achievement of clearly quantifiable and challenging targets specified beforehand.*

Pursuant to the Company's Remuneration Policy, long-term equity-based grants to members of the Managing Board under the 2014 Plan primarily consist of an award of performance stock units, i.e. long-term incentive awards which are dependent upon the achievement of pre-defined performance goals. Grants of restricted stock units, which are

based on time vesting only, are no longer to be granted on a regular basis and shall be reserved for use as special equity incentive rewards in certain situations. Performance stock units and restricted stock units are basically structured so that 40% of a grant vests after three years, 50% after five years and the remaining 10% after ten years. In 2015 and 2016, the members of the Managing Board elected to receive in lieu of their cash bonus the value earned in these years in performance stock units and restricted stock units respectively which vested over two years from the grant date.

4. *Best practice provision II.2.8 recommends that the maximum remuneration in the event of dismissal of a management board member may not exceed one year's salary (the "fixed" remuneration component). If the maximum of one year's salary would be manifestly unreasonable for a management board member who is dismissed during his first term of office, such board member shall be eligible for a severance pay not exceeding twice the annual salary.*

Our Managing Board members have entered into employment agreements with QIAGEN N.V. and some QIAGEN affiliates for which they hold managing positions. In case of termination of an agreement without serious cause as defined by the applicable law, the respective affiliate would remain obliged to compensate the Managing Board member for the remaining term of the employment agreement. QIAGEN believes that these contractual arrangements are well justified due to the long tenures of the Managing Board members.

5. *Best practice provision III.3.5 recommends that a person may be appointed to the supervisory board for a maximum of three 4-year terms.*

Prof. Karobath has been a member of the Supervisory Board of QIAGEN N.V. since 2000. Prof. Karobath contributes profound scientific and industry experience from various management positions in the pharmaceutical industry to the board profile. He has a unique knowledge about QIAGEN which is considered to be highly valuable. As a result, QIAGEN strongly supports the reappointment Prof. Karobath beyond the 12-year term as recommended by the Dutch Code.

6. *Best practice provision III.3.6 recommends that the supervisory board shall draw up a retirement schedule in order to avoid, as far as possible, a situation in which many supervisory board members retire at the same time. The retirement schedule shall be made generally available and shall be posted on the company's website.*

The Supervisory Board follows the practice to discuss retirement plans of individual members early to proactively manage continuity within the Supervisory Board. QIAGEN believes that this practice provides a more flexible and better succession planning than a fixed retirement schedule.

7. *Best practice provision III.7.1 recommends that a supervisory board member may not be granted any shares and/or rights to shares by way of remuneration.*

QIAGEN has granted stock options to the members of the Supervisory Board as a remuneration component since its establishment. Since 2007, Supervisory Board members have also been granted restricted stock units. We believe that the reasonable level of equity based compensation which we practice allows a positive alignment of shareholder interests with the other duties of the Supervisory Board and that this practice is necessary to attract and retain Supervisory Board members as the granting of share-based compensation to Supervisory Board members is a common practice in our industry.

8. *Best practice provision IV.1.1 recommends that a general meeting of shareholders is empowered to cancel binding nominations of candidates for the management board and supervisory board, and to dismiss members of either board by a simple majority of votes of those in attendance, although the company may require a quorum of at least one third of the voting rights outstanding for such vote to have force. If such quorum is not represented, but a majority of those in attendance votes in favor of the proposal, a second meeting may be convened and its vote will be binding, even without a one-third quorum.*

Our Articles of Association currently state that the General Meeting may at all times overrule a binding nomination by a resolution adopted by at least a two-thirds majority of the votes cast, if such majority represents more than half of the issued share capital. Although a deviation from provision IV.1.1 of the Dutch Code, the Supervisory Board and the Managing Board hold the view that these provisions will enhance the continuity of QIAGEN's management and policies.

## **NASDAQ Exemptions**

Exemptions from the NASDAQ corporate governance standards are available to foreign private issuers, such as QIAGEN when those standards are contrary to a law, rule or regulation of any public authority exercising jurisdiction over such issuer or contrary to generally accepted business practices in the issuer's country of domicile. In connection with QIAGEN's initial public offering, NASDAQ granted QIAGEN exemptions from certain corporate governance standards that are contrary to the laws, rules, regulations or generally accepted business practices of The Netherlands. These exemptions and the practices followed by QIAGEN are described below:

- QIAGEN is exempt from NASDAQ's quorum requirements applicable to meetings of ordinary shareholders. In keeping with the law of The Netherlands and generally accepted business practices in The Netherlands, QIAGEN's Articles of Association provide that there are no quorum requirements generally applicable to meetings of the General Meeting.
- QIAGEN is exempt from NASDAQ's requirements regarding the solicitation of proxies and provision of proxy statements for meetings of the General Meeting. QIAGEN does furnish proxy statements and solicit proxies for meetings of shareholders. Dutch corporate law sets a mandatory (participation and voting) record date for Dutch listed companies fixed at the twenty-eighth day prior to the day of the shareholders' meeting. Shareholders registered at such record date are entitled to attend and exercise their rights as shareholders at the General Meeting, regardless of a sale of shares after the record date.
- QIAGEN is exempt from NASDAQ's requirements that shareholder approval be obtained prior to the establishment of, or material amendments to, stock option or purchase plans and other equity compensation arrangements pursuant to which options or stock may be acquired by directors, officers, employees or consultants. QIAGEN is also exempt from NASDAQ's requirements that shareholder approval be obtained prior to certain issuances of stock resulting in a change of control, occurring in connection with acquisitions of stock or assets of another company or issued at a price less than the greater of book or market value other than in a public offering. QIAGEN's Articles of Association do not require approval of the General Meeting prior to the establishment of a stock plan. The Articles of Association also permit the General Meeting to grant the Supervisory Board general authority to issue shares without further approval of the General Meeting. QIAGEN's General Meeting has granted the Supervisory Board general authority to issue up to a maximum of our authorized capital without further approval of the General Meeting. QIAGEN plans to seek approval of the General Meetings for stock plans and stock issuances only where required under the law of The Netherlands or under QIAGEN's Articles of Association.

## Corporate Governance Statement

This is a statement concerning corporate governance as referred to in article 2a of the decree on additional requirements for annual reports (Vaststellingsbesluit nadere voorschriften inhoud jaarverslag) effective as of January 1, 2010 (the “Decree”). The information required to be included in this corporate governance statement as described in articles 3, 3a and 3b of the Decree can be found in the following sections of this Annual Report:

- The information concerning compliance with the Dutch Corporate Governance Code (published at [www.commissiecorporategovernance.nl](http://www.commissiecorporategovernance.nl)), as required by article 3 of the Decree, can be found in the relevant sections under "Corporate Governance Report" in this Annual Report;
- The information concerning QIAGEN's risk management and control frameworks relating to the financial reporting process, as required by article 3a sub a of the Decree, can be found in the relevant sections under "Corporate Governance Report" in this Annual Report;
- The information regarding the functioning of QIAGEN's General Meeting of Shareholders, and the authority and rights of QIAGEN's shareholders, as required by article 3a sub b of the Decree, can be found in the relevant sections under "Corporate Governance Report" in this Annual Report;
- The information regarding the composition and functioning of QIAGEN's Managing Board, the Supervisory Board and its committees, as required by article 3a sub c of the Decree, can be found in the relevant sections under "Corporate Governance Report" and the Report of the Supervisory Board in this Annual Report;
- The information concerning the inclusion of the information required by the Decree Article 10 EU Takeover Directive, as required by article 3b of the Decree, can be found in the relevant sections under "Corporate Governance Report" in this Annual Report;
- The information concerning the powers to issue and repurchase shares can be found under "Shareholdings and Other Information" in this Annual Report.

### *Requirements – Germany*

QIAGEN is required, as a company of which the shares are listed on the Frankfurt Stock Exchange, to follow the applicable German capital market laws, in particular the Wertpapierhandelsgesetz.

### *Requirements – the United States*

QIAGEN's shares are listed on the NASDAQ Global Select Market and must therefore comply with such of the requirements of US legislation, such as the Sarbanes-Oxley Act of 2002, regulations enacted under US securities laws and the listing standards of NASDAQ as are applicable to foreign private issuers.

## **Responsibility Statement of the Management Board**

In accordance with best practice II.1.5 of the Dutch corporate governance code of December 2008, taking into account the recommendation of the Corporate Governance Code Monitoring Committee on the application thereof, the Managing Board confirms that internal controls over financial reporting provide a reasonable level of assurance that the financial reporting does not contain any material inaccuracies, and confirms that these controls functioned properly in the year under review and that there are no indications that they will not continue to do so. The financial statements fairly represent the Company's financial condition and the results of the Company's operations and provide the required disclosures.

It should be noted that the above does not imply that these systems and procedures provide absolute assurance as to the realization of operational and strategic business objectives, or that they can prevent all misstatements, inaccuracies, errors, fraud and non-compliances with legislation, rules and regulations.

In accordance with Article 5.25c of the Financial Markets Supervisory Act, and in view of all of the above the management board confirms that, to its knowledge, the financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the annual report includes a fair review of the position at the balance sheet date and the development and performance of the business during the financial year together with a description of the principal risks and uncertainties that the Company faces.

**QIAGEN N.V.**

**CONSOLIDATED FINANCIAL STATEMENTS**

**QIAGEN N.V.**  
**CONSOLIDATED BALANCE SHEETS**  
(in thousands)

|                                                 | Note     | December 31,<br>2016 | December 31,<br>2015 |
|-------------------------------------------------|----------|----------------------|----------------------|
| <b>Assets</b>                                   |          |                      |                      |
| Current assets:                                 |          |                      |                      |
| Cash and cash equivalents                       | (3)      | \$ 439,180           | \$ 290,011           |
| Restricted cash                                 | (5, 10)  | —                    | 6,315                |
| Current available-for-sale financial assets     | (7)      | 92,999               | 130,817              |
| Trade accounts receivable                       | (8)      | 278,244              | 273,853              |
| Income taxes receivable                         |          | 23,795               | 26,940               |
| Inventories                                     | (3)      | 136,552              | 136,586              |
| Other current assets                            | (9)      | 45,210               | 49,612               |
| <b>Total current assets</b>                     |          | <b>1,015,980</b>     | <b>914,134</b>       |
| Non-current assets:                             |          |                      |                      |
| Property, plant and equipment                   | (10)     | 308,708              | 326,013              |
| Goodwill                                        | (12)     | 1,951,660            | 1,901,646            |
| Other intangible assets                         | (12)     | 718,295              | 792,365              |
| Investments in associates                       | (11)     | 10,826               | 16,716               |
| Non-current available-for-sale financial assets | (7)      | 42,237               | 20,654               |
| Deferred tax assets                             | (16)     | 95,203               | 4,706                |
| Fair value of derivative financial instruments  | (23, 24) | 190,173              | 179,359              |
| Other non-current assets                        | (9)      | 39,673               | 37,578               |
| <b>Total non-current assets</b>                 |          | <b>3,356,775</b>     | <b>3,279,037</b>     |
| <b>Total assets</b>                             |          | <b>\$ 4,372,755</b>  | <b>\$ 4,193,171</b>  |

The accompanying notes are an integral part of these consolidated financial statements.

**QIAGEN N.V.**  
**CONSOLIDATED BALANCE SHEETS**  
(in thousands, except par value)

|                                                                                                               | Note     | December 31,<br>2016 | December 31,<br>2015 |
|---------------------------------------------------------------------------------------------------------------|----------|----------------------|----------------------|
| <b>Liabilities and equity</b>                                                                                 |          |                      |                      |
| Current liabilities:                                                                                          |          |                      |                      |
| Trade and other accounts payable                                                                              |          | \$ 51,218            | \$ 52,306            |
| Provisions                                                                                                    | (13)     | 4,664                | 4,752                |
| Income tax payable                                                                                            |          | 26,906               | 21,515               |
| Other current liabilities                                                                                     | (14)     | 225,641              | 187,317              |
| <b>Total current liabilities</b>                                                                              |          | <b>308,429</b>       | <b>265,890</b>       |
| Non-current liabilities:                                                                                      |          |                      |                      |
| Non-current financial debts                                                                                   | (15)     | 1,064,041            | 1,044,041            |
| Deferred tax liabilities                                                                                      | (16)     | 51,161               | 24,927               |
| Fair value of derivative financial instruments                                                                | (23, 24) | 341,893              | 308,408              |
| Other non-current liabilities                                                                                 | (14)     | 97,406               | 53,107               |
| <b>Total non-current liabilities</b>                                                                          |          | <b>1,554,501</b>     | <b>1,430,483</b>     |
| Equity:                                                                                                       |          |                      |                      |
| Preference shares, 0.01 EUR par value, authorized — 450,000 shares, no shares issued and outstanding          |          |                      |                      |
| Financing preference shares, 0.01 EUR par value, authorized — 40,000 shares, no shares issued and outstanding |          |                      |                      |
| Common Shares, 0.01 EUR par value, authorized — 410,000 shares, issued — 239,707 shares in 2016 and 2015      |          |                      |                      |
|                                                                                                               |          | 2,812                | 2,812                |
| Share premium                                                                                                 |          | 1,897,399            | 1,862,835            |
| Retained earnings                                                                                             | (17)     | 1,059,927            | 1,036,687            |
| Reserves                                                                                                      |          | (330,307)            | (255,158)            |
| Less treasury shares, at cost — 5,147 and 6,702 shares in 2016 and 2015, respectively                         | (17)     | (120,006)            | (152,412)            |
| Equity attributable to the owners of QIAGEN N.V.                                                              |          | 2,509,825            | 2,494,764            |
| Non-controlling interest                                                                                      |          | —                    | 2,034                |
| <b>Total equity</b>                                                                                           |          | <b>2,509,825</b>     | <b>2,496,798</b>     |
| <b>Total liabilities and equity</b>                                                                           |          | <b>\$ 4,372,755</b>  | <b>\$ 4,193,171</b>  |

The accompanying notes are an integral part of these consolidated financial statements.

**QIAGEN N.V.**  
**CONSOLIDATED INCOME STATEMENTS**  
(in thousands, except per share data)

|                                                                             | Note                | Years ended December 31, |                     |
|-----------------------------------------------------------------------------|---------------------|--------------------------|---------------------|
|                                                                             |                     | 2016                     | 2015                |
| <b>Net sales</b>                                                            | <b>(4)</b>          | <b>\$ 1,337,991</b>      | <b>\$ 1,280,986</b> |
| Cost of sales                                                               |                     | (503,954)                | (461,726)           |
| <b>Gross profit</b>                                                         |                     | <b>834,037</b>           | <b>819,260</b>      |
| Operating expenses:                                                         |                     |                          |                     |
| Other operating income                                                      |                     | 758                      | 500                 |
| Research and development expense                                            |                     | (170,461)                | (126,961)           |
| Sales and marketing expense                                                 |                     | (440,443)                | (398,483)           |
| General and administrative, integration and other expense                   |                     | (129,248)                | (102,067)           |
| Other operating expense                                                     |                     | (4,339)                  | (3,457)             |
| <b>Total operating expenses</b>                                             | <b>(10, 12, 21)</b> | <b>(743,733)</b>         | <b>(630,468)</b>    |
| <b>Income from operations</b>                                               |                     | <b>90,304</b>            | <b>188,792</b>      |
| Financial income                                                            |                     | 6,776                    | 4,753               |
| Financial expense                                                           | (15)                | (39,022)                 | (37,299)            |
| Foreign currency losses, net                                                |                     | (15)                     | (519)               |
| (Loss) gain from investments in associates                                  | (11)                | (5,478)                  | 577                 |
| Other financial expense, net                                                | (15, 24)            | (19,419)                 | (8,208)             |
| <b>Total finance expense, net</b>                                           |                     | <b>(57,158)</b>          | <b>(40,696)</b>     |
| <b>Income before income taxes</b>                                           |                     | <b>33,146</b>            | <b>148,096</b>      |
| Income taxes                                                                | (16)                | 16,131                   | (15,724)            |
| <b>Net income</b>                                                           |                     | <b>\$ 49,277</b>         | <b>\$ 132,372</b>   |
| - attributable to noncontrolling interest                                   |                     | \$ (101)                 | \$ (246)            |
| - attributable to the owners of QIAGEN N.V.                                 |                     | \$ 49,378                | \$ 132,618          |
|                                                                             |                     |                          |                     |
| Basic earnings per common share attributable to the owners of QIAGEN N.V.   |                     | \$ 0.21                  | \$ 0.57             |
| Diluted earnings per common share attributable to the owners of QIAGEN N.V. |                     | \$ 0.21                  | \$ 0.56             |
|                                                                             |                     |                          |                     |
| Weighted average shares outstanding (in thousands)                          |                     |                          |                     |
| Basic                                                                       |                     | 234,800                  | 233,483             |
| Diluted                                                                     |                     | 238,993                  | 237,022             |

The accompanying notes are an integral part of these consolidated financial statements.

**QIAGEN N.V.**

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**  
(in thousands)

|                                                                                               | Note | Years ended December 31,<br>2016 | 2015       |
|-----------------------------------------------------------------------------------------------|------|----------------------------------|------------|
| Net income                                                                                    |      | \$ 49,277                        | \$ 132,372 |
| Other comprehensive income (loss) not reclassified to profit or loss in subsequent periods:   |      |                                  |            |
| Gain (loss) on pensions, before tax                                                           |      | 929                              | (1,809)    |
| Other comprehensive income (loss) to be reclassified to profit or loss in subsequent periods: |      |                                  |            |
| Foreign currency translation adjustments, before tax                                          |      | (66,377)                         | (126,096)  |
| (Losses) Gains on cash flow hedges, before tax                                                | (24) | (3,969)                          | 5,337      |
| Reclassification adjustments on cash flow hedges, before tax                                  | (24) | (6,228)                          | (5,273)    |
| Net change in fair value of available-for-sale financial assets, before tax                   | (7)  | (1,421)                          | 1,215      |
| Other comprehensive loss, before tax                                                          |      | (77,066)                         | (126,626)  |
| Income tax relating to components of other comprehensive loss                                 |      | 2,563                            | 1,140      |
| Total other comprehensive loss, after tax                                                     |      | (74,503)                         | (125,486)  |
| Comprehensive (loss) income                                                                   |      | (25,226)                         | 6,886      |
| Comprehensive income attributable to non-controlling interest                                 |      | (545)                            | (146)      |
| Comprehensive (loss) income attributable to the owners of QIAGEN N.V.                         |      | \$ (25,771)                      | \$ 6,740   |

The accompanying notes are an integral part of these consolidated financial statements.

**QIAGEN N.V.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(in thousands)

|                                                                                   | Note     | Years ended December 31,<br>2016 | 2015              |
|-----------------------------------------------------------------------------------|----------|----------------------------------|-------------------|
| Net income                                                                        |          | \$ 49,277                        | \$ 132,372        |
| Adjustments to reconcile net income to net cash provided by operating activities: |          |                                  |                   |
| Depreciation, amortization and impairment of intangible and other assets          |          | 222,608                          | 204,342           |
| Restructuring related impairment charges                                          | (6)      | 45,462                           | —                 |
| Amortization of debt discount and issuance costs                                  |          | 20,451                           | 19,955            |
| Deferred income taxes                                                             | (16)     | (59,790)                         | (23,871)          |
| Share based compensation                                                          | (20)     | 28,288                           | 23,973            |
| Gain on early redemption of debt                                                  | (15)     | —                                | (2,525)           |
| (Gain) loss on available for sale financial instruments                           | (7)      | (1,360)                          | 6,039             |
| Changes in fair value of contingent consideration                                 |          | (6,501)                          | (5,225)           |
| Other non-cash items, including fair value changes in derivatives                 | (15, 24) | 38,255                           | 13,938            |
| Changes in operating assets and liabilities:                                      |          |                                  |                   |
| Accounts receivable                                                               | (8)      | (12,238)                         | (24,764)          |
| Inventories                                                                       | (3)      | (20,346)                         | (33,194)          |
| Other assets                                                                      |          | 10,189                           | 55,045            |
| Accounts payable                                                                  |          | (1,466)                          | 7,732             |
| Accrued and other liabilities                                                     | (14)     | 36,899                           | (8,221)           |
| Income taxes                                                                      | (16)     | 33,145                           | 28,785            |
| Interest paid                                                                     |          | (18,227)                         | (20,799)          |
| Interest received                                                                 |          | 6,082                            | 2,328             |
| Income taxes paid, net of refunds                                                 |          | (22,670)                         | (34,441)          |
| <b>Net cash provided by operating activities</b>                                  |          | <b>348,058</b>                   | <b>341,469</b>    |
| Purchases of property, plant and equipment                                        |          | (28,317)                         | (47,586)          |
| Purchases of intangible assets                                                    |          | (65,607)                         | (69,895)          |
| Development expenses                                                              | (12)     | (5,674)                          | (19,862)          |
| Proceeds from sale of equipment                                                   |          | 63                               | 103               |
| Purchases of available-for-sale financial assets                                  | (7)      | (496,304)                        | (317,570)         |
| Proceeds from available-for-sale financial assets                                 | (7)      | 533,847                          | 367,714           |
| Purchase of investments                                                           | (11)     | (23,448)                         | (6,053)           |
| Cash paid for acquisitions, net of cash acquired                                  | (5)      | (90,490)                         | (66,930)          |
| Other investing activities                                                        |          | (8,800)                          | (5,983)           |
| <b>Net cash used in investing activities</b>                                      |          | <b>(184,730)</b>                 | <b>(166,062)</b>  |
| Proceeds from long-term debt                                                      | (15)     | —                                | (86)              |
| Repayment of long-term debt                                                       | (15)     | (6,738)                          | (251,514)         |
| Principal payments on finance leases                                              |          | (1,322)                          | (1,079)           |
| Proceeds from issuance of common shares                                           |          | 6,269                            | 10,316            |
| Purchase of treasury shares                                                       | (17)     | —                                | (20,818)          |
| Other financing activities                                                        |          | (9,595)                          | 1,497             |
| <b>Net cash used in financing activities</b>                                      |          | <b>(11,386)</b>                  | <b>(261,684)</b>  |
| Effect of exchange rate changes on cash and cash equivalents                      |          | (2,773)                          | (17,417)          |
| <b>Net increase (decrease) in cash and cash equivalents</b>                       |          | <b>149,169</b>                   | <b>(103,694)</b>  |
| Cash and cash equivalents, beginning of period                                    |          | 290,011                          | 393,705           |
| Cash and cash equivalents, end of period                                          |          | <u>\$ 439,180</u>                | <u>\$ 290,011</u> |
| Supplemental disclosure of non-cash investing and financing activities:           |          |                                  |                   |
| Equipment purchased through capital lease                                         |          | \$ 113                           | \$ 231            |
| Intangible assets acquired in non-monetary exchange                               |          | \$ —                             | \$ 5,900          |

The accompanying notes are an integral part of these consolidated financial statements.

**QIAGEN N.V.**  
**CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY**  
(in thousands)

|                                                                            |      | Common Shares |          |               |                   |                         |                            |                 |                              | Treasury Shares |              | Equity attributable to the owners of QIAGEN N.V. | Non-controlling interest | Total equity |
|----------------------------------------------------------------------------|------|---------------|----------|---------------|-------------------|-------------------------|----------------------------|-----------------|------------------------------|-----------------|--------------|--------------------------------------------------|--------------------------|--------------|
|                                                                            | Note | Shares        | Amount   | Share premium | Retained earnings | Cash flow hedge reserve | Available-for-sale reserve | Pension reserve | Foreign currency translation | Shares          | Amount       |                                                  |                          |              |
| <b>BALANCE AT JANUARY 1, 2015</b>                                          |      | 239,707       | \$ 2,812 | \$1,948,698   | \$ 929,349        | \$ —                    | \$ —                       | \$ (882)        | \$ (128,398)                 | (7,684)         | \$ (167,190) | \$ 2,584,389                                     | \$ 8,255                 | \$2,592,644  |
| Net income (loss)                                                          |      | —             | —        | —             | 132,618           | —                       | —                          | —               | —                            | —               | —            | 132,618                                          | (246)                    | 132,372      |
| Other comprehensive income (loss)                                          |      | —             | —        | —             | —                 | 48                      | 1,215                      | (1,266)         | (125,875)                    | —               | —            | (125,878)                                        | 392                      | (125,486)    |
| <b>Total comprehensive income</b>                                          |      | —             | —        | —             | 132,618           | 48                      | 1,215                      | (1,266)         | (125,875)                    | —               | —            | 6,740                                            | 146                      | 6,886        |
| Purchase of treasury shares                                                |      | —             | —        | —             | —                 | —                       | —                          | —               | —                            | (842)           | (20,818)     | (20,818)                                         | —                        | (20,818)     |
| Redemption of convertible debt                                             |      | —             | —        | (123,084)     | —                 | —                       | —                          | —               | —                            | —               | —            | (123,084)                                        | —                        | (123,084)    |
| Tax benefit of employee stock plans                                        |      | —             | —        | 13,247        | —                 | —                       | —                          | —               | —                            | —               | —            | 13,247                                           | —                        | 13,247       |
| Share-based payments                                                       |      | —             | —        | 23,974        | —                 | —                       | —                          | —               | —                            | —               | —            | 23,974                                           | —                        | 23,974       |
| Employee stock plans                                                       |      | —             | —        | —             | (25,280)          | —                       | —                          | —               | —                            | 1,824           | 35,596       | 10,316                                           | —                        | 10,316       |
| Acquisition of QIAGEN Marseille S.A. shares from non-controlling interests |      | —             | —        | —             | —                 | —                       | —                          | —               | —                            | —               | —            | —                                                | (6,367)                  | (6,367)      |
| <b>BALANCE AT DECEMBER 31, 2015</b>                                        |      | 239,707       | \$ 2,812 | \$1,862,835   | \$1,036,687       | \$ 48                   | \$ 1,215                   | \$ (2,148)      | \$ (254,273)                 | (6,702)         | \$ (152,412) | \$ 2,494,764                                     | \$ 2,034                 | \$2,496,798  |
| Net income (loss)                                                          |      | —             | —        | —             | 49,378            | —                       | —                          | —               | —                            | —               | —            | 49,378                                           | (101)                    | 49,277       |
| Other comprehensive income (loss)                                          |      | —             | —        | —             | —                 | (7,648)                 | (1,371)                    | 650             | (66,780)                     | —               | —            | (75,149)                                         | 646                      | (74,503)     |
| <b>Total comprehensive income</b>                                          |      | —             | —        | —             | 49,378            | (7,648)                 | (1,371)                    | 650             | (66,780)                     | —               | —            | (25,771)                                         | 545                      | (25,226)     |
| Tax benefit of employee stock plans                                        |      | —             | —        | 6,276         | —                 | —                       | —                          | —               | —                            | —               | —            | 6,276                                            | —                        | 6,276        |
| Purchase of treasury shares                                                | (17) | —             | —        | —             | —                 | —                       | —                          | —               | —                            | —               | —            | —                                                | —                        | —            |
| Share-based payments                                                       | (20) | —             | —        | 28,288        | —                 | —                       | —                          | —               | —                            | —               | —            | 28,288                                           | —                        | 28,288       |
| Employee stock plans                                                       | (20) | —             | —        | —             | (26,138)          | —                       | —                          | —               | —                            | 1,555           | 32,406       | 6,268                                            | —                        | 6,268        |
| Acquisition of QIAGEN Marseille S.A. shares from non-controlling interests | (5)  | —             | —        | —             | —                 | —                       | —                          | —               | —                            | —               | —            | —                                                | (2,624)                  | (2,624)      |
| Acquisition of Exiqon A/S                                                  | (5)  | —             | —        | —             | —                 | —                       | —                          | —               | —                            | —               | —            | —                                                | 5,519                    | 5,519        |
| Acquisition of Exiqon A/S shares from non-controlling interests            | (5)  | —             | —        | —             | —                 | —                       | —                          | —               | —                            | —               | —            | —                                                | (5,474)                  | (5,474)      |
| <b>BALANCE AT DECEMBER 31, 2016</b>                                        |      | 239,707       | \$ 2,812 | \$1,897,399   | \$1,059,927       | \$ (7,600)              | \$ (156)                   | \$ (1,498)      | \$ (321,053)                 | (5,147)         | \$ (120,006) | \$ 2,509,825                                     | \$ —                     | \$2,509,825  |

The accompanying notes are an integral part of these consolidated financial statements.

**QIAGEN N.V.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**FOR THE YEAR ENDED DECEMBER 31, 2016**

**1. Corporate Information, Basis of Presentation and Statement of Compliance**

QIAGEN N.V. is a public limited liability company ('naamloze vennootschap') under Dutch law with registered office at Hulsterweg 82, Venlo, The Netherlands. QIAGEN N.V., a Netherlands holding company, and subsidiaries (we, our or the Company) is the leading global provider of Sample to Insight solutions to transform biological materials into valuable molecular insights. Our sample technologies isolate and process DNA, RNA and proteins from blood, tissue and other materials. Assay technologies make these biomolecules visible and ready for analysis. Bioinformatics software and knowledge bases interpret data to report relevant, actionable insights. Automation solutions tie these together in seamless and cost-effective molecular testing workflows. We provide these workflows to four major customer classes: Molecular Diagnostics (human healthcare), Applied Testing (forensics, veterinary testing and food safety), Pharma (pharmaceutical and biotechnology companies) and Academia (life sciences research). We market our products in more than 130 countries.

The accompanying consolidated financial statements were prepared in accordance with International Financial Reporting standards (IFRS) as endorsed by the European Union (EU) and all amounts are presented in U.S. dollars rounded to the nearest thousand, unless otherwise indicated. The consolidated financial statements have been prepared on a historical cost basis, except for derivative financial instruments, contingent consideration and available-for-sale financial assets that have been measured at fair value. The consolidated financial statements also comply with the financial reporting requirements included in Section 9 in Book 2 of the Netherlands Civil Code, as far as applicable.

On June 28, 2016, we acquired Exiqon A/S, located in Vedbaek, Denmark and on November 20, 2015, we acquired MO BIO Laboratories, Inc., located in Carlsbad, California. Accordingly, at the acquisition dates, all of the assets acquired and liabilities assumed were recorded at their respective fair values and our consolidated results of operations include the operating results from the acquired companies from the acquisition dates.

As of December 31, 2016 and 2015, the fair values of derivative financial instruments in non-current assets and liabilities have been presented separately on the consolidated balance sheets.

The consolidated financial statements of QIAGEN for the year ended December 31, 2016, were authorized for issue in accordance with a resolution of the Supervisory Board on April 6, 2017.

**2. Effects of New Accounting Policies and Disclosures**

The new accounting policies adopted in 2016 did not have a material impact to the condensed consolidated financial statements.

- The IASB has issued *Annual Improvements to IFRSs 2012-2014 Cycle*. The amendments were effective January 1, 2016. The IASB uses the Annual Improvements process to make necessary, but non-urgent, amendments to IFRSs if those amendments will not be included as part of any other project. *Annual Improvements to IFRSs 2012-2014 Cycle* is a series of amendments to IFRSs in response to issues raised during the 2012-2014 cycle for annual improvements. The following standards were amended:
  - IFRS 5, *Non-current Assets Held for Sale and Discontinued Operations*;
  - IFRS 7, *Financial Instruments: Disclosures*;
  - IAS 19, *Employee Benefits*; and
  - IAS 34, *Interim Financial Reporting*.

The adoption did not have a significant effect on our financial position, results of operations or cash flows.

- The IASB has issued *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*, which contains narrow-scope amendments to IFRS 10, *Consolidated Financial Statements*, and IAS 28, *Investments in Associates and Joint Ventures (2011)*. The amendments were effective for annual periods beginning on or after January 1, 2016. The amendments address an acknowledged inconsistency between the requirements in IFRS 10 and those in IAS 28 (2011), in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The main consequence of the amendments is that a full gain or loss is recognized when a transaction involves a business (whether it is housed in a subsidiary or not). A partial gain or loss is recognized when a transaction involves

assets that do not constitute a business, even if these assets are housed in a subsidiary. The adoption did not have a significant effect on our financial position, results of operations or cash flows.

- The IASB has issued, *Investment Entities: Applying the Consolidation Exception*. This guidance includes narrow-scope amendments to IFRS 10, *Consolidated Financial Statements*, IFRS 12, *Disclosure of Interests in Other Entities*, and IAS 28, *Investments in Associates and Joint Ventures*. The amendments introduce clarifications to the requirements when accounting for investment entities and also provide relief in particular circumstances, which will reduce the costs of applying the Standards. The adoption did not have a significant effect on our financial position, results of operations or cash flows.
- The IASB has published *Accounting for Acquisitions of Interests in Joint Operations, Amendments to IFRS 11*. IFRS 11, *Joint Operations*, addresses the accounting for interests in joint ventures and joint operations. The amendments to IFRS 11 add new guidance on how to account for the acquisition of an interest in a joint operation that constitutes a business. These amendments require the acquirer of an interest in a joint operation in which the activity constitutes a business, as defined in IFRS 3, *Business Combinations*, to apply all of the principles on business combinations accounting in IFRS 3 and other IFRSs except for those principles that conflict with the guidance in this IFRS. In addition, the acquirer should disclose the information required by IFRS 3 and other IFRSs for business combinations. The amendments were effective for annual periods beginning on or after January 1, 2016. The adoption did not have a significant effect on our financial position, results of operations or cash flows.

#### **New and amended standards and interpretations not yet adopted:**

We have not early adopted the following new and amended standards. We intend to adopt the new and amended standards at their effective dates.

- In June 2016, the IASB issued three amendments to IFRS 2, *Share-based Payment*, to eliminate diversity in practice in the classification and measurement of particular share-based payment transactions. The amendments are narrow in scope and address specific areas of classification and measurement and are intended to eliminate diversity in practice in three main areas:
  - The effects of vesting conditions on the measurement of a cash-settled share-based payment transaction;
  - The classification of a share-based payment transaction with net settlement features for withholding tax obligations; and
  - The accounting where a modification to the terms and conditions of a share-based payment transaction changes its classification from cash-settled to equity-settled.

The amendments to IFRS 2 are effective for accounting periods beginning on or after January 1, 2018. Entities are required to apply the amendments without restating prior periods, but retrospective application is permitted if elected for all three amendments and other criteria are met. We anticipate adopting the amendments on January 1, 2018 without any impact on our financial position, results of operations or cash flows at adoption.

- In January 2016, the IASB issued amendments to IAS 12, *Income Taxes*. The amendments, *Recognition of Deferred Tax Assets for Unrealised Losses (Amendments to IAS 12)*, clarify how to account for deferred tax assets related to debt instruments measured at fair value. IAS 12 provides requirements on the recognition and measurement of current or deferred tax liabilities or assets. The amendments issued clarify the requirements on recognition of deferred tax assets for unrealized losses, to address diversity in practice. The amendments are effective for annual periods beginning on or after January 1, 2017. We adopted as of January 1, 2017 without any impact on our financial position, results of operations or cash flows at adoption.
- In January 2016, the IASB published IFRS 16 *Leases*. Under the new guidance, lessees will be required to present right-of-use assets and lease liabilities on the balance sheet. This new lease guidance requires that a lessee recognize the following for leases at the commencement date:
  - A lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and
  - A right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term.

IFRS 16 is effective for annual reporting periods beginning on or after January 1, 2019. Earlier application is permitted for entities that apply IFRS 15, *Revenue from Contracts with Customers*, at or before the date of initial application of IFRS 16. A lessee should apply IFRS 16 to its leases either: (a) retrospectively to each prior reporting period presented applying IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*; or (b) retrospectively with the cumulative effect of initially applying IFRS 16 recognized at the date of initial application. A lessor is not required to make any adjustments on transition for leases in which it is a lessor and should account for those leases applying IFRS 16 from the date of initial application. We do not plan to early adopt this standard and we anticipate that the adoption of this standard will require changes to our systems and processes. We expect this standard to increase total assets and

total liabilities, however, we are currently evaluating the potential size of the impact that IFRS 16 may have on our consolidated financial statements.

- The IASB issued the fourth and final version of IFRS 9, *Financial Instruments*, which will be applicable beginning on or after January 1, 2018. The new guidance is expected to mainly impact the classification and measurement of financial assets and will result in additional disclosures. We are currently evaluating the impact on our financial position, results of operations or cash flows.
- The IASB has completed its process to replace IAS 39, *Financial Instruments: Recognition and Measurement*, with the issuance of the final amendments to IFRS 9. IFRS 9 (July 2014) is effective for annual periods beginning on or after January 1, 2018. Earlier application is permitted. IFRS 9 (July 2014) should be applied retrospectively in accordance with IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*. IFRS 9 (July 2014) should not be applied to items that have been derecognized at the date of initial application. We are currently evaluating the impact on our financial position, results of operations or cash flows.
- In May 2014, the IASB issued IFRS 15, *Revenue from Contracts with Customers* and the standard will be effective for annual periods beginning on or after January 1, 2018 with earlier application permitted. This standard could impact in particular in the areas of allocating revenue to the different performance obligations under one contract and the timing of revenue recognition. The standard foresees different alternative approaches for the adoption of the new guidance. We have not experienced significant issues in our implementation process and based on the analysis to date, we currently do not expect the adoption to have a material impact on our existing revenue accounting policies or on the recognition of revenue from product sales. However, we continue to evaluate the impact the guidance may have in connection with collaboration and license agreements and other revenue sources. We anticipate adopting this standard on its effective date, January 1, 2018. We have not yet determined the method of adoption, but assuming the impact is not material, we expect to adopt the new standard using the modified retrospective method with an adjustment to beginning retained earnings for the cumulative effect of the change.

### **3. Summary of Significant Accounting Policies**

#### **3.1 Consolidation Principles**

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries as at December 31, 2016.

Subsidiaries are fully consolidated from the date of acquisition, being the date on which the Company obtains control, and continue to be consolidated until the date that such control ceases. An entity is controlled when the Company has power over the entity, exposure or rights to variable returns from its involvement with the entity, and the ability to affect those returns through its power over the entity. In determining whether control exists, potential voting rights must be taken into account if those rights are substantive, in other words they can be exercised on a timely basis when decisions about the relevant activities of the entity are to be taken. Entities consolidated by the Company are referred to as "subsidiaries." The financial statements of the subsidiaries are prepared for the same reporting period as the parent company, using consistent accounting policies. All intra-Company balances, income and expenses, unrealized gains and losses and dividends resulting from intra-Company transactions are eliminated in full.

Profit or loss and each component of other comprehensive income are attributed to the owners of the parent and to the noncontrolling interest. Total comprehensive income is attributed to the owners of the parent and to the noncontrolling interest even this results in a deficit balance.

A change in the ownership interest of a subsidiary, without a change of control, is accounted for as an equity transaction.

If the Company loses control over a subsidiary, it derecognizes the assets (including goodwill) and liabilities of the subsidiary, the carrying amount of any noncontrolling interest, the cumulative translation differences, recorded in equity, recognizes the fair value of the consideration received, recognizes the fair value of any investment retained, any surplus or deficit in profit or loss and reclassifies the parent's share of components previously recognized in other comprehensive income to profit or loss.

#### **3.2 Business Combinations and Goodwill**

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any noncontrolling interest in the acquiree. The Company measures the noncontrolling interest in the acquiree at fair-value. Acquisition related costs incurred are expensed.

When the Company acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date.

Any contingent consideration to be transferred by the acquirer will be recognized at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration which is deemed to be an asset or liability will be recognized either in profit or loss or as change to other comprehensive income. If the contingent consideration is classified as equity, it shall not be remeasured until it is finally settled within equity.

Goodwill is initially measured at cost being the excess of the consideration transferred and the amount recognized for noncontrolling interest over the Company's net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognized in profit or loss.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Company's cash generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured based on the relative values of the operation disposed of and the portion of the cash-generating unit retained.

Management monitors and makes decisions regarding the Company's operations on a functional specific and global level. Therefore, we concluded that the consolidated Company as a whole qualifies as one cash generating unit.

### **3.3 Investments in Associates and Joint Arrangements**

Investments in associates are accounted for using the equity method. An associate is an entity in which the Company has significant influence, generally participations of 20% or more of the voting power, but over which it does not exercise management control.

Under the equity method, the investment in the associate is carried in the statement of financial position at cost plus post acquisition changes in the Company's share of net assets of the associate.

After application of the equity method, the Company determines whether it is necessary to recognize an additional impairment loss on the Company's investment in its associates. The Company determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. If this is the case the Company calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value and recognizes the amount in the income statement.

Upon loss of significant influence over the associate, the Company measures and recognizes any retaining investment at its fair value.

### **3.4 Foreign Currency Translation**

The Company's presentation currency is the U.S. dollar (US\$) which is also the parents company's functional currency. The subsidiaries' functional currencies are the local currency of the respective country with the exception of QIAGEN Finance (Luxembourg) S.A. which functional currencies is the U.S. dollar. Statements of financial position prepared in the functional currencies are translated to the presentation currency at exchange rates in effect at the end of the accounting period except for shareholders' equity accounts, which are translated at rates in effect when these balances were originally recorded. Revenue and expense accounts are translated at a weighted average of exchange rates during the period. The cumulative effect of translation is included in shareholders' equity. On disposal of the Group Company, such translation differences are recognized in the income statement as part of the gain or loss on sale.

Foreign currency transactions involving monetary assets and liabilities denominated in a currency other than the functional currency of the entity are translated using the exchange rate prevailing at the dates of the transactions. Foreign currency transaction gains and losses realized until settlement are included in the income statement, except for those related to intercompany transactions of a long-term investment nature which represent in substance part of the reporting entity's net investment in a foreign entity; such gains and losses are included in the cumulative foreign currency translation adjustments component of shareholders' equity. The net (loss) gain on foreign currency transactions in 2016 was less than \$0.1 million, and in 2015 was \$(0.5) million.

The exchange rates of key currencies affecting the Company were as follows:

| (US\$ equivalent for one) | Closing rate as at December 31, |        | Annual average rate |        |
|---------------------------|---------------------------------|--------|---------------------|--------|
|                           | 2016                            | 2015   | 2016                | 2015   |
| Euro (EUR)                | <b>1.0541</b>                   | 1.0887 | <b>1.1068</b>       | 1.1100 |
| Pound Sterling (GBP)      | <b>1.2312</b>                   | 1.4833 | <b>1.3560</b>       | 1.5286 |
| Swiss Franc (CHF)         | <b>0.9816</b>                   | 1.0048 | <b>1.0153</b>       | 1.0406 |
| Australian Dollar (AUD)   | <b>0.7222</b>                   | 0.7308 | <b>0.7439</b>       | 0.7522 |
| Canadian Dollar (CAD)     | <b>0.7430</b>                   | 0.7202 | <b>0.7552</b>       | 0.7836 |
| Japanese Yen (JPY)        | <b>0.0085</b>                   | 0.0083 | <b>0.0092</b>       | 0.0083 |
| Chinese Yuan (CNY)        | <b>0.1440</b>                   | 0.1542 | <b>0.1506</b>       | 0.1592 |

### 3.5 Revenue Recognition

Our revenues are reported net of sales and value added taxes, discounts and sales allowances, and are derived primarily from the sale of consumable and instrumentation products, and to a much lesser extent, from the sale of services, intellectual property and technology. We recognize revenue when four basic criteria are met: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services have been rendered; (3) the fee is fixed or determinable; and (4) collectability is reasonably assured.

*Consumable and Related Products:* In the last three years, revenue from consumable product sales has accounted for approximately 79%-80% of our net sales and is generally recognized upon transfer of title consistent with the shipping terms. We maintain a small amount, on average less than \$2.0 million in total, of consignment inventory at certain customer locations. Revenues for the consumable products which are consigned in this manner are recognized upon consumption. We generally allow returns of consumable products if the product is returned in a timely manner and in good condition. Allowances for returns are provided for based upon the historical pattern of returns and Management's evaluation of specific factors that impact the risk of returns.

Revenues from related products include software-as-a-service (SaaS), license fees, intellectual property and patent sales, royalties and milestone payments and over the last three years has accounted for approximately 7%-8% of our net sales. Revenue from SaaS arrangements is recognized ratably over the duration of the agreement unless the terms of the agreement indicate that revenue should be recognized in a different pattern, for example based on usage. License fees from research collaborations include payments for technology transfer and access rights. Non-refundable, up-front payments received in connection with collaborative research and development agreements are generally deferred and recognized on a straight-line basis over the contract period during which there is any continuing obligation. Revenue from intellectual property and patent sales is recognized when earned, either at the time of sale, or over the contract period when licensed. Payments for milestones, generally based on the achievement of substantive and at-risk performance criteria, are recognized in full at such time as the specified milestone has been achieved according to the terms of the agreement. Royalties from licensees are based on reported sales of licensed products and revenues are calculated based on contract terms when reported sales are reliably measurable, fees are fixed or determinable and collectability is reasonably assured.

*Instrumentation:* Revenue from instrumentation includes the instrumentation equipment, installation, training and other instrumentation services, such as extended warranty services or product maintenance contracts and over the last three years has accounted for approximately 12%-13% of net sales. Revenue from instrumentation equipment is recognized when title passes to the customer, upon either shipment or written customer acceptance after satisfying any installation and training requirements.

We offer our customers access to our instrumentation via reagent rental agreements which place instrumentation with customers without requiring them to purchase the equipment. Instead, we recover the cost of providing the instrumentation in the amount charged for consumable products. The instruments placed with customers under a reagent rental agreement are depreciated and charged to cost of sales on a straight-line basis over the estimated life of the instrument, typically 3 to 5 years. The costs to maintain these instruments in the field are charged to cost of sales as incurred. Revenue from these reagent rental agreements is allocated to the elements within the arrangement (the lease, the sale of consumables and/or services) and recognized for each unit of accounting as appropriate.

We have contracts with multiple elements which include instrumentation equipment, either leased under a reagent rental agreement or sold directly, together with other elements such as installation, training, extended warranty services or product maintenance contracts or consumable products. These contracts are assessed to determine whether there is more than one unit of accounting. In order for a deliverable to qualify as a separate unit of accounting, all of the following criteria must be met:

- The delivered items have value to the client on a stand-alone basis;
- The arrangement includes a general right of return relative to the delivered items, and
- Delivery or performance of the undelivered items is considered probable and substantially in the control of the Company.

Arrangement consideration is allocated at the inception of the arrangement to all deliverables on the basis of their relative selling price. When applying the relative selling price method, the selling price for each deliverable is determined using (a) company-specific objective evidence of selling price, if it exists; or otherwise (b) third-party evidence of selling price. If neither company-specific objective evidence nor third-party evidence of selling price exists for a deliverable, then the best estimated selling price for the deliverable is used. The arrangement consideration is allocated to the separate units of accounting based on each unit's relative fair value. If these criteria are not met, deliverables included in an arrangement are accounted for as a single unit of accounting and revenue and costs are deferred until the period or periods in which the final deliverable is provided.

We have evaluated the deliverables in our multiple-element arrangements and concluded that they are separate units of accounting because the delivered item or items have value to the customer on a standalone basis and for an arrangement that includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is considered probable and substantially in our control. Revenues from installation and training are recognized as services are completed, based on company-specific objective evidence, which is determined by reference to the price customers pay when the services are sold separately. Revenues from extended warranty services or product maintenance contracts are recognized on a straight-line basis over the term of the contract, typically one year. Company-specific objective evidence of fair value of extended warranty services or product maintenance is determined based on the price charged for the maintenance and support when sold separately. Revenues from the instrumentation equipment and consumable products are recognized when the products are delivered and there are no further performance obligations. Company-specific objective evidence of fair value of instrumentation equipment and consumable products is determined based on the price charged for the instrument and consumables when sold separately. Certain of our reagent rental arrangements include termination provisions for breach of contract. However, these termination provisions would not impact recognized revenues. Our arrangements do not include any provisions for cancellation or refunds.

#### *Shipping and Handling Income and Costs*

Shipping and handling costs charged to customers are recorded as revenue in the period that the related product sale revenue is recorded. Associated costs of shipping and handling are included in sales and marketing expenses. For the years ended December 31, 2016 and 2015, shipping and handling costs totaled \$26.5 million and \$26.2 million, respectively.

#### *Advertising Costs*

The costs of advertising are expensed as incurred and are included as a component of sales and marketing expense. Advertising costs for the years ended December 31, 2016 and 2015 were \$8.4 million and \$7.2 million, respectively.

#### *General and Administrative, Integration and Other*

General and administrative expenses primarily represent the costs required to support administrative infrastructure. In addition, we incur indirect acquisition and business integration costs in connection with business combinations. These costs represent incremental costs that we believe would not have been incurred absent the business combinations. Major components of these costs include payroll and related costs for employees remaining with the Company on a transitional basis; public relations, advertising and media costs for re-branding of the combined organization; and, consulting and related fees incurred to integrate or restructure the acquired operations.

#### *Restructuring Costs*

Restructuring costs include personnel costs (principally termination benefits), facility closure and contract termination costs. Termination benefits are recorded when it is probable that employees will be entitled to benefits and the amounts can be reasonably estimated. Estimates of termination benefits are based on the frequency of past termination benefits, the similarity of benefits under the current plan and prior plans, and the existence of statutory required minimum benefits. Facility closure and other costs are recorded when the liability is incurred. The specific restructuring measures and associated estimated costs are based on management's best business judgment under the existing circumstances at the time the estimates are made. If future events require changes to these estimates, such adjustments will be reflected in the period of the revised estimate. See Note 6 for Restructuring details.

### **3.6 Research and Development**

Research costs are expensed as incurred. Development expenditures on an individual project are recognized as an intangible asset when the Company can demonstrate:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale.
- Its intention to complete and its ability to use or sell the asset.
- How the asset will generate future economic benefits.
- The availability of resources to complete the asset.

- The ability to measure reliably the expenditure during development.

Following initial recognition of the development expenditure as an asset, the cost model is applied requiring the asset to be carried at cost less any accumulated amortization and accumulated impairment losses.

Amortization of the asset begins when development is complete and the asset is available for use. It is amortized over the period of expected future benefit. Amortization is recorded in cost of sales. During the period of development, the asset is tested for impairment annually. The capitalized expenses are amortized on a straight-line basis over their estimated useful lives (between two and five years).

### **3.7 Government Grants**

We recognize government grants when there is reasonable assurance that all conditions will be complied with and the grant will be received. Our government grants generally represent subsidies for specified activities and are therefore recognized when earned as a reduction of the expenses recorded for the activity that the grants are intended to compensate. Thus, when the grant relates to research and development expense, the grant is recognized over the same period that the related costs are incurred. Otherwise, amounts received under government grants are recorded as liabilities in the statement of financial position. When the grant relates to an asset, the value of the grant is deducted from the carrying amount of the asset and recognized over the same period that the related asset is depreciated.

The Company has received cost grants and investment grants. In 2016, the Company recorded income from government grants in the amount of \$0.4 million (2015: \$1.2 million). As of December 31, 2016, liabilities in the amount of \$1.8 million (2015: \$0.4 million) are recorded with respect to grants which have been received but for which not all conditions have been met.

### **3.8 Borrowing Costs**

Borrowing costs directly attributable to the acquisition, construction or production of an asset that takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the respective assets (qualifying asset) when such borrowing costs are significant. All other borrowing costs are expensed in the period they occur.

### **3.9 Post-Employment Benefits**

The Company operates a number of defined benefit and defined contribution plans. For defined benefit plans, the Company provides for benefits payable to their employees on retirement by charging current service costs to income. The defined benefit liability comprises the present value of the defined benefit obligation less past service cost and actuarial gains and losses not yet recognized and less the fair value of plan assets out of which the obligations are to be settled directly. The Company's contributions to the defined contribution pension plans are charged to the income statement in the year to which they relate. Refer to Note 21 'Employee Benefits' for more details.

### **3.10 Share-Based Payments**

The Company has a stock option plan, which is described in detail under Note 20 'Share-Based Payments'. A compensation charge is calculated at the date the options are granted. This charge is recognized over the stock option's vesting period. When the option is exercised, the proceeds received net of any transaction costs are credited to share capital and share premium.

### **3.11 Taxation**

Taxes reported in the consolidated income statements include current and deferred income taxes.

#### *Current income tax*

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, by the reporting date, in the countries where the Company operates and generates taxable income.

Current income tax relating to items recognized directly in equity is recognized in equity and not in the income statement. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

#### *Deferred tax*

Deferred tax is provided using the liability method on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognized outside profit or loss is recognized outside profit or loss. Deferred tax items are recognized in correlation to the underlying transaction either in other comprehensive income or directly in equity.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

#### *Uncertain tax positions*

Uncertainties exist with respect to the interpretation of complex tax regulations, changes in tax laws, and the amount and timing of future taxable income. Given the wide range of international business relationships and the long-term nature and complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to tax income and expense already recorded.

The Company establishes provisions, based on reasonable estimates, for possible consequences of audits by the tax authorities of the respective countries in which it operates. The amount of such provisions is based on various factors, such as experience of previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority. Such differences of Interpretation may arise on a wide variety of issues depending on the conditions prevailing in the respective Group Company's domicile.

### **3.12 Financial Assets**

The Company classifies its financial assets in the following categories: at fair value through profit or loss (FVTPL), loans and receivables (LaR), held-to maturity, and available for sale (Afs), or as derivatives designated as hedging instruments in an effective hedge, as appropriate. The Company determines the classification of its financial assets at initial recognition.

All financial assets are recognized initially at fair value plus, in the case of investments not at fair value through profit or loss, directly attributable transaction costs.

The Company's financial assets include cash and short-term deposits, trade and other receivables, loan and other receivables, quoted and unquoted financial instruments, and derivative financial instruments.

Financial assets are derecognized when the rights to receive cash flows from the assets have expired, the Company retains the right to receive cash flows from the assets, but has assumed an obligation to pay them in full without material delay to a third party under a 'pass through' arrangement, or the Company has transferred its rights to receive cash flows from the assets and either (a) has transferred substantially all the risks and rewards of the assets or (b) has neither transferred nor retained substantially all the risks and rewards of the assets, but has transferred control of the assets.

Where the Company has transferred its rights to receive cash flows from assets and has neither transferred nor retained substantially all the risks and rewards of the assets nor transferred control of the assets, the assets are recognized to the extent of the Company's continuing involvement in the assets. Continuing involvement that takes the form of a guarantee over the transferred assets is measured at the lower of the original carrying amount of the assets and the maximum amount of consideration that the Company could be required to repay.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Company could be required to repay.

#### *Financial assets at fair value through profit or loss (FVTPL)*

Financial assets at fair value through profit or loss include derivative financial instruments not designated as hedging instrument and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as at fair value through profit or loss if they are acquired for the purpose of selling or repurchasing in the near term.

Financial assets at fair value through profit and loss are carried in the statement of financial position at fair value with changes in fair value recognized in finance income or finance cost in the income statement.

The Company has not designated any financial assets upon initial recognition as at fair value through profit or loss.

The Company evaluated its financial assets at fair value through profit and loss whether the intent to sell them in the near term is still appropriate. When the Company is unable to trade these financial assets due to inactive markets and management's intent to sell them in the foreseeable future significantly changes, the Company may elect to reclassify these financial assets in rare circumstances. The reclassification to loans and receivables, available-for-sale or held to maturity depends on the nature of the asset. This evaluation does not affect any financial assets designated at fair value through profit or loss using the fair value option at designation.

This category includes derivative financial instruments entered into by the Company that are not designated as hedging instruments and hedge relations as defined by IAS 39 *Financial Instruments: Recognition and Measurement*.

#### *Loans and receivables (LaR)*

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such financial assets are subsequently measured at amortized cost using the effective interest

rate method, less impairment. Amortized cost is calculated by taking into account any discount or premium on acquisition and fee or costs that are an integral part of the effective interest rate.

The effective interest rate amortization is included in finance income in the income statement. The losses arising from impairment are recognized in the income statement in finance costs.

#### *Available-for-sale financial investments (Afs)*

Available-for-sale financial investments include equity and debt securities. Equity investments classified as available-for sale are those, which are neither classified as held for trading nor designated at fair value through profit or loss. Debt securities in this category are those which are intended to be held for an indefinite period of time and which may be sold in response to needs for liquidity or in response to changes in the market conditions.

After initial measurement, available-for-sale financial investments are subsequently measured at fair value with unrealized gains or losses recognized as other comprehensive income in the available-for-sale reserve until the investment is derecognized, at which time the cumulative gain or loss is recognized in other financial income and expense, or determined to be impaired, at which time the cumulative loss is recognized in the income statement in other financial income and expense and removed from the available-for-sale reserve.

The Company evaluated its available-for-sale financial assets whether the ability and intention to sell them in the near term is still appropriate. When the Company is unable to trade these financial assets due to inactive markets and management's intent significantly changes to do so in the foreseeable future, the Company may elect to reclassify these financial assets in rare circumstances. Reclassification to loans and receivables is permitted when the financial asset meets the definition of loans and receivables and has the intent and ability to hold these assets for the foreseeable future or maturity.

For a financial asset reclassified out of the available-for-sale category, any previous gain or loss on that asset that has been recognized in equity (Available-for-sale reserve in other comprehensive income) is amortized to profit or loss over the remaining life of the investment using the effective interest rate. Any difference between the new amortized cost and the expected cash flows is also amortized over the remaining life of the asset using the effective interest rate. If the asset is subsequently determined to be impaired then the amount recorded in equity is reclassified to the income statement other financial income and expense.

### **3.13 Financial Liabilities**

Financial liabilities within the scope of IAS 39 are classified as financial liabilities at fair value through profit or loss, loans and borrowings, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. The Company determines the classification of its financial liabilities at initial recognition.

All financial liabilities are recognized initially at fair value and in the case of loans and borrowings, less directly attributable transaction costs.

The Company's financial liabilities include trade and other payables, bank overdraft, loans and borrowings, and derivative financial instruments.

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the income statement.

#### *Financial liabilities at fair value through profit or loss*

Financial liabilities are classified at fair value through profit or loss if they are acquired for the purpose of selling in the near term. This category includes derivative financial instruments entered into by the Company that are not designated as hedging instruments in hedge relationships as defined by IAS 39.

Gains or losses on liabilities at fair value through profit or losses are recognized in the income statement.

The Company has not designated any financial liabilities upon initial recognition as at fair value through profit or loss.

#### *Loans and borrowings*

After initial recognition, interest bearing loans and borrowings are subsequently measured at amortized cost using the effective interest rate method. Gains and losses are recognized in the income statement when the liabilities are derecognized as well as through the effective interest rate method amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fee or costs that are an integral part of the effective interest rate. The effective interest rate amortization is included in finance cost in the income statement.

### 3.14 Offsetting of Financial Instruments

Financial assets and financial liabilities are offset and the net amount reported in the consolidated statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

### 3.15 Fair Value of Financial Instruments

The fair value of financial instruments that are traded in active markets at each reporting date is determined by reference to quoted market prices or dealer price quotations (mid-price), without any deduction for transaction costs.

For financial instruments not traded in an active market, the fair value is determined using appropriate valuation techniques. Such techniques may include using recent arm's length market transactions; reference to the current fair value of another instrument that is substantially the same; discounted cash flow analysis or other valuation models.

An analysis of fair values of financial instruments and further details as to how they are measured are provided in Note 23 'Fair Value Measurements'.

### 3.16 Derivative Financial Instruments

#### *Initial recognition and subsequent measurement*

The Company uses derivative financial instruments such as forward currency contracts and interest rate swaps contracts to mitigate its foreign currency risks and interest rate risks. Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Any gains or losses arising from changes in fair value on derivatives are taken directly to the income statement.

Refer to Note 24 'Financial Risk Factors and Use of Derivative Financial Instruments' for more details.

### 3.17 Cash and Cash Equivalents

Cash and cash equivalents consist of cash on deposit in banks and other cash invested temporarily in various instruments that are short-term and highly liquid, and having an original maturity of less than 90 days at the date of purchase.

| (in thousands)            | 2016              | 2015              |
|---------------------------|-------------------|-------------------|
| Cash at bank and on hand  | \$ 137,615        | \$ 217,644        |
| Short-term bank deposits  | 301,565           | 72,367            |
| Cash and Cash Equivalents | <u>\$ 439,180</u> | <u>\$ 290,011</u> |

### 3.18 Inventories

Inventories are stated at the lower of cost and net realizable value. The moving average method of valuation is used. The cost of work in process and finished goods includes raw materials, direct labor and production overhead expenditure based upon normal operating capacity. Net realizable value is the estimated selling price in the ordinary course of business less the cost of completion and distribution expenses. Provisions are established for slow-moving and obsolete inventory.

| (in thousands)  | 2016              | 2015              |
|-----------------|-------------------|-------------------|
| Raw materials   | \$ 29,402         | \$ 27,051         |
| Work in process | 28,123            | 21,066            |
| Finished goods  | 79,027            | 88,469            |
| Inventories     | <u>\$ 136,552</u> | <u>\$ 136,586</u> |

Included in inventories as of December 31, 2016, are \$15.2 million (2015: \$13.5 million) of inventory provisions. The movement in inventory provisions was recorded under cost of sales. During 2016 inventories in the amount of \$167.8 million have been recognized as cost of sales (2015: \$146.3 million).

### 3.19 Property, Plant and Equipment

Property, plant and equipment, including equipment under finance lease, are stated at cost of acquisition or construction cost less accumulated depreciation and accumulated impairment in value. Depreciation is computed using the straight-line and

declining balance methods over the following estimated useful lives of the assets:

|                                |            |
|--------------------------------|------------|
| Buildings and improvements     | 5-40 years |
| Machinery and equipment        | 3-10 years |
| Furniture and office equipment | 3-10 years |

Land is not depreciated. Construction costs include borrowing costs and operating expenses that are directly attributable to items of property, plant and equipment capitalized during construction. Subsequent expenditure on an item of property, plant and equipment is capitalized at cost only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. Repair and maintenance costs are expensed as incurred. Gains and losses on disposal or retirement of items of property, plant and equipment are determined by comparing the proceeds received with the carrying amounts and are included in the consolidated income statements. The asset's residual values, useful lives and methods of depreciation are reviewed, and adjusted if appropriate, at each financial year end.

### 3.20 Leases

The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangement at inception date: whether fulfillment of the arrangement is dependent on the use of a specific asset or assets or the arrangement conveys a right to use the asset.

#### *Company as a lessee*

Finance leases, which transfer to the Company substantially all the risks and benefits incidental to ownership of the leased item, are capitalized at the commencement of the lease at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognized in the income statement.

Leased assets are depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Company will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

Operating lease payments are recognized as an expense in the income statement on a straight line basis over the lease term.

#### *Company as a lessor*

Leases where the Company does not transfer substantially all the risks and benefits of ownership of the asset are classified as operating leases. Initial direct costs incurred in negotiating an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same bases as rental income. Contingent rents are recognized as revenue in the period in which they are earned.

### 3.21 Intangible Assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is its fair value as at the date of acquisition. Expenditure on acquired technology rights, patents, trademarks and licenses are capitalized as intangible assets when it is probable that future economic benefits will flow to the Company and the cost can be measured reliably. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses.

Amortization expense related to developed technology and patent and license rights acquired in a business combination is included in cost of sales. Amortization of trademarks and customer base acquired in a business combination is recorded in sales and marketing expense. Amortization expenses of intangible assets not acquired in a business combination are recorded within cost of sales, research and development, or sales and marketing line items based on the nature and use of the asset.

The useful lives of intangible assets are assessed as either finite or indefinite. Intangible assets with finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at each financial year end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset is accounted for by changing the amortization period or method, as appropriate, and are treated as changes in accounting estimates. The amortization expense on intangible assets with finite lives is recognized in the income statement in the expense category consistent with the function of the intangible asset.

Developed technology, patents and license rights, computer software, development costs and other intellectual properties are amortized on a straight-line basis over their estimated useful lives as follows:

|                                                  |            |
|--------------------------------------------------|------------|
| Developed technology, patents and license rights | 5-15 years |
| Computer software                                | 3-7 years  |
| Development costs                                | 3-5 years  |
| Other intellectual properties                    | 5-15 years |

### 3.22 Impairment

#### *Impairment of financial assets*

The Company assesses at each reporting date whether there is any objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events that has occurred after the initial recognition of the asset (an incurred 'loss event') and that loss event has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include indications that the debtors or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganization and where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults. Where the carrying amount of a financial asset exceeds its estimated future cash flows, the asset is considered impaired and is written down to its recoverable amount.

#### *Impairment of non-financial assets*

The Company assesses at each reporting date whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or the Company's assets. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded subsidiaries or other available fair value indicators.

Impairment losses are recognized in the income statement in those expense categories consistent with the function of the impaired asset, except for property previously revalued where the revaluation was taken to other comprehensive income. In this case, the impairment is also recognized in other comprehensive income up to the amount of any previous revaluation.

For assets excluding goodwill, an assessment is made at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such indication exists, the Company estimates the asset's or cash-generating unit's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the income statement unless the asset is carried at a revalued amount, in which case the reversal is treated as a revaluation increase.

#### *Goodwill*

Goodwill is subject to impairment tests annually, as of October 1, or earlier if indicators of potential impairment exist. We assess goodwill for impairment at least annually in the absence of an indicator of possible impairment and immediately upon an indicator of possible impairment.

Impairment is determined for goodwill by assessing the recoverable amount of each cash-generating unit (or Company of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash generating unit is less than their carrying amount an impairment loss is recognized. Impairment losses relating to goodwill cannot be reversed in future periods.

#### *Intangible assets*

Intangible assets with indefinite useful lives are tested for impairment annually as of October 1 either individually or at the cash generating unit level, as appropriate and when circumstances indicate that the carrying value may be impaired.

### 3.23 Provisions

Provisions are recognized by the Company when a present legal or constructive obligation exists as a result of past events, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate of the amount of the obligation can be made. Where the effect of the time value of money is material, the amount of a provision is the present value of the expenditures expected to be required to settle the obligation. Where discounting is used, the increase in the provision due to the passage of time is recognized as a financing cost.

Restructuring provisions are recorded in the period in which management has committed to a detailed formal plan, has raised a valid expectation in those affected that it will carry out the restructuring and it becomes probable that a liability will be incurred and the amount can be reasonably estimated. Restructuring provisions comprise lease termination penalties, other penalties and employee termination payments.

### **3.24 Segment Reporting**

We determined that we operate as one operating segment. Our chief operating decision maker (CODM) makes decisions based on the Company as a whole. In addition, we have a common basis of organization and types of products and services which derive revenues and consistent product margins. Accordingly, we operate and make decisions as one cash generating unit.

### **3.25 Cash Flow Statement**

The cash flow statement provides an explanation of the changes in cash and cash equivalents. It is prepared on the basis of a comparison of the statements of financial position as of January 1 and December 31 using the indirect method. Investing and financing transactions that do not require the use of cash or cash equivalents have been excluded from the cash flow statement. In 2016 and 2015 such eliminations primarily related to non-cash impacts from the convertible bonds.

### **Significant Accounting Estimates and Judgments**

The preparation of the consolidated financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are described below.

#### *Purchase Price Allocation*

The purchase price allocation for acquisitions requires extensive use of accounting estimates and judgments to allocate the purchase price to the identifiable tangible and intangible assets acquired, including in-process research and development, and liabilities assumed based on their respective fair values. An acquisition may include contingent consideration as part of the purchase price. Contingent consideration is accounted for at fair value at the acquisition date with subsequent changes to the fair value being recognized in earnings. Additionally, we must determine whether an acquired entity is considered to be a business or a set of net assets, because a portion of the purchase price can only be allocated to goodwill in a business combination.

We have made several acquisitions in recent years. The purchase prices for the acquisitions were allocated to tangible and intangible assets acquired and liabilities assumed based on their estimated fair values at the acquisition dates. We engaged an independent third-party valuation firm to assist us in determining the estimated fair values of in-process research and development and identifiable intangible assets. Such a valuation requires significant estimates and assumptions, including but not limited to determining the timing and estimated costs to complete the in-process projects, projecting regulatory approvals, estimating future cash flows, and developing appropriate discount rates. We believe the estimated fair values of contingent consideration and assets acquired and liabilities assumed are based on reasonable assumptions. However, the fair value estimates for the purchase price allocations may change during the allowable allocation period, which is up to one year from the acquisition dates, if additional information becomes available.

#### *Fair Value Measurements*

We have categorized our assets and liabilities that are measured at fair value, based on the priority of the inputs to the valuation techniques, in a three-level fair value hierarchy: Level 1 - using quoted prices in active markets for identical assets or liabilities; Level 2 - using observable inputs other than quoted prices; and Level 3 – using unobservable inputs. We primarily apply the market approach for recurring fair value measurements, maximize our use of observable inputs and minimize our use of unobservable inputs. We utilize the mid-point price between bid and ask prices for valuing the majority of our assets and liabilities measured and reported at fair value. In addition to using market data, we make assumptions in valuing assets and liabilities, including assumptions about risk and the risks inherent in the inputs to the valuation technique.

Certain of our derivative instruments, which are classified in Level 2 of the fair value hierarchy, are valued using industry-standard models that consider various inputs, including time value, volatility factors, and current market and contractual prices for the underlying instruments, as well as other relevant economic measures. Substantially all of these inputs are observable in

the marketplace throughout the full term of the instrument, can be derived from observable data or are supported by observable prices at which transactions are executed in the marketplace.

Certain of our acquisitions involve contingent consideration, the payment of which is contingent on the occurrence of future events. Contingent consideration is classified in Level 3 of the fair value hierarchy and is initially recognized at fair value as a cost of the acquisition. After the acquisition, the contingent consideration liability is remeasured each reporting period. The fair value of contingent consideration is measured predominantly on unobservable inputs such as assumptions about the likelihood of achieving specified milestone criteria, projections of future financial performance, assumed discount rates and assumed weightings applied to potential scenarios in deriving a probability weighted fair value. Significant judgment is used in developing these estimates and assumptions both at the acquisition date and in subsequent periods. If actual events differ from management's estimates, or to the extent these estimates are adjusted in the future, our financial condition or results of operations could be affected in the period of any change.

For other fair value measurements, we generally use an income approach to measure fair value when there is not a market observable price for an identical or similar asset or liability. This approach utilizes management's best assumptions regarding expectations of projected cash flows, and discounts the expected cash flows using a commensurate risk-adjusted discount rate.

#### *Impairment of Assets*

Assets are tested or reviewed for impairment in accordance with the accounting policy stated under Note 3.22.

In the fourth quarter of 2016, we performed our annual impairment assessment of goodwill (using data as of October 1, 2016). We performed our goodwill impairment testing on a single cash generating unit basis which is consistent with our reporting structure. Differences in assumptions used in projecting future operating cash flows and cost of funds could have a significant impact on the determination of impairment amounts. In estimating future cash flows, we used our internal five-year projections. Our projections were based on recent sales data for existing products, planned timing of new product launches or capital projects, and customer commitments related to new and existing products. These projections also included assumptions of future production volumes and pricing. Based on the sensitivity analysis performed, we determined that in the event that our estimates of projected future cash flows, growth rates and weighted average cost of capital were too high by 10%, there would still be no impact on the reported value of goodwill. We concluded that no impairment existed at October 1, 2016 or through December 31, 2016.

Due to the numerous variables associated with our judgments and assumptions relating to the valuation of the cash generating unit and the effects of changes in circumstances affecting these valuations, both the precision and reliability of the resulting estimates are subject to uncertainty, and as additional information becomes known, we may change our estimates.

#### *Development Costs*

Development costs are capitalized in accordance with the accounting policy stated under Note 3.6. Determining the amounts to be capitalized requires management to make assumptions regarding the expected future cash generation of the assets, discount rates to be applied and the expected period of benefits. At least annually, management reviews the carrying amount of projects and assessed whether they were impaired or not.

#### *Income Taxes*

The Company is subject to income taxes in numerous jurisdictions. Significant judgment is required in determining provisions for income taxes. Some of these estimates are based on interpretations of existing laws or regulations. Various internal and external factors, such as changes in tax laws, regulations and rates, changing interpretations of existing tax laws or regulations, future level of research and development spending and changes in overall levels of pre-tax income may have favorable or unfavorable effects on the income tax and deferred tax provisions in the period in which such determination is made.

Deferred tax assets are recognized in accordance with the accounting policy stated in Note 3.11. Deferred tax assets are recognized for net operating loss carry-forwards to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized based upon the likely timing and level of future taxable profits.

#### *Share-Based Payments - Stock Options*

The Company utilizes the Black-Scholes-Merton valuation model for estimating the fair value of its stock options as stated under Note 20 'Share-Based Payments'. Option valuation models, including Black-Scholes-Merton, require the input of highly subjective assumptions, and changes in the assumptions used can materially affect the grant date fair value of an award.

#### *Share-Based Payments - Restricted Stock Units and Performance Stock Units*

Restricted stock units and performance stock units represent rights to receive Common Shares at a future date. The fair market value is determined based on the number of stock units granted and the fair market value of our shares on the grant date. The

fair market value at the time of the grant, less an estimate for pre-vesting forfeitures, is recognized in expense over the vesting period. We grant performance-based stock units subject to performance periods of one-year up to three years. Thus the estimates of performance achieved during the performance period may be subject to significant changes from period to period as the performance is completed.

#### 4. Segment Information

Considering the acquisitions made during 2016, we determined that we still operate as one business segment in accordance with IFRS 8 *Operating Segments*. As a result of our continued restructuring and streamlining of the growing organization, our chief operating decision maker (CODM) continues to make decisions with regards to business operations and resource allocation based on evaluations of QIAGEN as a whole. Accordingly, we operate as one business segment. Summarized product category and geographic information and operating income is shown in the tables below.

##### Product Category Information

Net sales for the product categories are attributed based on those revenues related to sample and assay products and similarly related revenues, and revenues derived from instrumentation sales.

| (in thousands)                   | 2016                | 2015                |
|----------------------------------|---------------------|---------------------|
| <b>Net Sales</b>                 |                     |                     |
| Consumables and related revenues | \$ 1,166,131        | \$ 1,114,580        |
| Instrumentation                  | 171,860             | 166,406             |
| Total                            | <u>\$ 1,337,991</u> | <u>\$ 1,280,986</u> |

##### Geographical Information

Net sales are attributed to countries based on the location of the customer. QIAGEN operates manufacturing facilities in Germany, China, the United Kingdom, and the United States that supply products to customers as well as QIAGEN subsidiaries in other countries. The sales from these manufacturing operations to other countries are included in the Net Sales of the countries in which the manufacturing operations are based. The intersegment portions of such net sales are excluded to derive consolidated net sales. No single customer represents more than ten percent of consolidated net sales. Our country of domicile is the Netherlands, which reported net sales of \$12.4 million and \$11.3 million for the years ended 2016 and 2015, respectively, and these amounts are included in the line item Europe, Middle East and Africa as shown in the table below.

| (in thousands)                 | 2016                | 2015                |
|--------------------------------|---------------------|---------------------|
| <b>Net Sales</b>               |                     |                     |
| Americas:                      |                     |                     |
| United States                  | \$ 555,676          | \$ 525,532          |
| Other Americas                 | 71,797              | 79,578              |
| Total Americas                 | <u>627,473</u>      | <u>605,110</u>      |
| Europe, Middle East and Africa | 428,055             | 409,955             |
| Asia Pacific and Rest of World | 282,463             | 265,921             |
| Total                          | <u>\$ 1,337,991</u> | <u>\$ 1,280,986</u> |

Long-lived assets include property, plant and equipment, goodwill, other intangible assets, investments in associates, non-current available-for-sale financial assets and other non-current assets. The Netherlands, which is included in the balances for Europe, reported long-lived assets of \$20.8 million and \$21.3 million for the years ended 2016 and 2015, respectively.

| (in thousands)                       | 2016         | 2015         |
|--------------------------------------|--------------|--------------|
| <b>Long-lived assets</b>             |              |              |
| Americas:                            |              |              |
| United States                        | \$ 1,801,426 | \$ 1,852,201 |
| Other Americas                       | 10,954       | 8,870        |
| Total Americas                       | 1,812,380    | 1,861,071    |
| Germany                              | 493,510      | 497,179      |
| Other Europe, Middle East and Africa | 517,005      | 476,319      |
| Asia Pacific and Rest of World       | 248,504      | 260,403      |
| Total                                | \$ 3,071,399 | \$ 3,094,972 |

### Operating Income Information

Our chief operating decision maker (CODM) makes decisions with regard to business operations and resource allocation considering many measures, the primary income measure being adjusted operating income. Adjusted results are financial measures that are considered to provide insight into our core business performance. The table below provides details regarding adjustments from the primary metric used by the CODM to income from operations for the years ended December 31, 2016 and 2015.

| (in thousands)                                     | 2016             | 2015              |
|----------------------------------------------------|------------------|-------------------|
| Adjusted income from operations                    | \$ 256,607       | \$ 314,549        |
| Purchased intangible amortization                  | (119,220)        | (123,126)         |
| Business integration and acquisition related items | (38,560)         | (15,112)          |
| Development costs                                  | (4,942)          | 12,464            |
| Other income and expense                           | (3,581)          | 17                |
| <b>Income from operations</b>                      | <b>\$ 90,304</b> | <b>\$ 188,792</b> |

### 5. Acquisitions

Acquisitions have been accounted for as business combinations, and the acquired companies' results have been included in the accompanying consolidated income statements from their respective dates of acquisition. Our acquisitions have historically been made at prices above the fair value of the acquired net assets, resulting in goodwill, due to expectations of synergies of combining the businesses. These synergies include use of our existing infrastructure, such as sales force, shared service centers, distribution channels and customer relations, to expand sales of the acquired businesses' products; use of the infrastructure of the acquired businesses to cost-effectively expand sales of our products; and elimination of duplicative facilities, functions and staffing.

#### 2016 Acquisitions

During the second quarter of 2016, we acquired a majority shareholding in Exiqon A/S (Exiqon), a publicly traded Danish company headquartered in Vedbaek, Denmark, which is a leading provider of RNA analysis solutions with a proprietary Locked Nucleic Acid (LNA) technology. The acquisition expands our leadership position in Sample to Insight solutions for RNA analysis. On June 28, 2016, we paid DKK 627.4 million (\$95.2 million) for approximately 94.52% of the outstanding Exiqon common shares. On the acquisition date, the fair value of the remaining shares was \$5.5 million. The fair value of this noncontrolling share was based on reference to quoted market values of Exiqon stock. Since the acquisition date, we have acquired the remaining Exiqon shares for \$5.5 million in cash, which is included in other financing activities in the accompanying consolidated statements of cash flows, and as of December 31, 2016 we held 100% of Exiqon's shares. For the year ended December 31, 2016, acquisition-related costs of \$6.3 million are included in general and administrative, integration and other in the accompanying consolidated statements of income.

The preliminary purchase price allocation as of December 31, 2016 did not differ from the preliminary purchase price allocation as of June 30, 2016 other than a \$9.4 million increase in developed technology, a \$9.2 million increase in deferred tax asset on tax loss carry forwards, a \$2.8 million decrease in customer relationships, a \$1.2 million increase of long-term deferred tax liability, a \$0.4 million increase in prepaid expenses and other current assets and an additional \$0.3 million increase of other opening balance sheet liabilities. The corresponding impact for these adjustments was a decrease to goodwill of \$14.7 million.

The allocation of the purchase price is preliminary and is not yet finalized. The preliminary allocation of the purchase price is based upon preliminary estimates which used information that was available to management at the time the financial statements were prepared and these estimates and assumptions are subject to change within the measurement period, up to one year from the acquisition date. Accordingly, the allocation may change. We continue to gather information about the deferred taxes related to the intangible assets acquired as well as the deferred tax asset on tax loss carry forwards.

| (in thousands)                                                                  | Exiqon<br>acquisition |
|---------------------------------------------------------------------------------|-----------------------|
| Purchase Price:                                                                 |                       |
| Cash consideration                                                              | \$ 95,163             |
| Fair value of remaining shares                                                  | 5,519                 |
|                                                                                 | <u>\$ 100,682</u>     |
| Preliminary Allocation:                                                         |                       |
| Cash and cash equivalents                                                       | \$ 4,824              |
| Accounts receivable                                                             | 3,581                 |
| Inventory                                                                       | 1,553                 |
| Prepaid expenses and other current assets                                       | 1,853                 |
| Accounts payable                                                                | (1,289)               |
| Accruals and other current liabilities                                          | (11,587)              |
| Debt assumed                                                                    | (6,068)               |
| Other long-term liabilities                                                     | (197)                 |
| Deferred tax asset on tax loss carry forwards                                   | 10,016                |
| Fixed and other long-term assets                                                | 2,870                 |
| Developed technology                                                            | 18,500                |
| Customer relationships                                                          | 3,800                 |
| Tradenames                                                                      | 1,400                 |
| Goodwill                                                                        | 76,807                |
| Deferred tax liability on fair value of identifiable intangible assets acquired | (5,381)               |
|                                                                                 | <u>\$ 100,682</u>     |

The weighted average amortization period for the intangible assets is 11.1 years. The goodwill acquired is not deductible for tax purposes.

Revenue and earnings in the reporting periods since the acquisition date have not been significant. No pro forma financial information has been provided herein as the acquisition of Exiqon did not have a material impact to net sales, net income or earnings per share on a pro forma basis.

### **2015 Acquisitions**

During 2015, we completed three acquisitions which were not significant to the overall consolidated financial statements, including the acquisition of MO BIO Laboratories Inc., a privately-held U.S. company, that is considered a leader in sample technologies for metagenomics and microbiome analysis. Purchase consideration for these acquisitions totaled \$66.9 million in cash, net of cash acquired, and as of December 31, 2016, the purchase price allocations are final. Each of these acquisitions did not have a material impact to net sales, net income or earnings per share and therefore no pro forma information has been provided herein.

### **Other Acquisition**

During 2011, we acquired a majority shareholding in QIAGEN Marseille S.A., formerly Ipsogen S.A. (Marseille), a publicly listed company founded and based in Marseille, France. During 2014, we acquired additional Marseille shares for a total of \$0.3 million and held 90.27% of the Marseille shares as of December 31, 2014. In February 2015, QIAGEN Marseille, a fully consolidated entity, sold all its assets and liabilities, with the exception of its intellectual property portfolio. During 2015, we acquired additional Marseille shares through a tender offer for a total of \$8.0 million and held 97.22% of the QIAGEN Marseille shares as of December 31, 2015. Per the terms of the tender offer, \$2.5 million was set aside as of December 31, 2015

in restricted cash for the remaining shares which were acquired in the first quarter of 2016 and as of December 31, 2016 we held 100% of the QIAGEN Marseille shares.

## 6. Restructuring

### *2016 Restructuring*

During the fourth quarter of 2016, we initiated series of targeted actions to support faster sales momentum and improve efficiency and accountability. The objective with these actions is to ensure that we grow sustainably and consistently in the coming years. Measures include simplifying our geographic presence with site reductions, focusing resources to shared service centers, and streamlining selected organizational structures. We expect to complete the program in 2017 at a total cost of approximately \$90.0 million, of which \$80.2 million was incurred in 2016 and approximately \$10.0 million is expected to be incurred in 2017 primarily related to personnel and facility costs.

The table below shows how the costs related to the restructuring program were recorded.

| (in thousands)                                    | Personnel<br>Related | Facility<br>Related | Contract and<br>Other Costs | Asset<br>Impairments<br>& Disposals | Total            |
|---------------------------------------------------|----------------------|---------------------|-----------------------------|-------------------------------------|------------------|
| Cost of sales                                     | \$ 1,222             | \$ 205              | \$ 43                       | \$ 11,553                           | \$ 13,023        |
| Research and development                          | 4,176                | 1,798               | 14                          | 20,370                              | 26,358           |
| Sales and marketing                               | 12,753               | 4,335               | 6,797                       | 1,046                               | 24,931           |
| General and administrative, integration and other | 1,069                | 827                 | 1,461                       | 1,547                               | 4,904            |
| Other expense, net                                | —                    | —                   | —                           | 10,946                              | 10,946           |
| Total                                             | <u>\$ 19,220</u>     | <u>\$ 7,165</u>     | <u>\$ 8,315</u>             | <u>\$ 45,462</u>                    | <u>\$ 80,162</u> |

Personnel and related expense includes a \$2.0 million reduction in costs as a result of forfeitures of share-based compensation in connection with terminations. We incurred consulting costs of \$7.5 million, included in Contract and Other Costs, related to third party consulting costs associated with the development of the restructuring plan. Asset Impairments and Disposals include \$31.4 million for intangible asset impairments, \$2.0 million for fixed asset abandonments, and \$1.1 million primarily in connection with the write-off of prepaid contract costs. The total \$10.9 million of expense included in other expense, net in the accompanying consolidated statements of income is composed of \$8.3 million associated with an impairment of an equity method investment and a disposal of goodwill of \$2.6 million.

The following table summarizes the cash components of the restructuring activity.

| (in thousands)                                                 | Personnel<br>Related | Facility Related | Contract and<br>Other Costs | Total            |
|----------------------------------------------------------------|----------------------|------------------|-----------------------------|------------------|
| Costs incurred in 2016                                         | \$ 21,252            | \$ 7,165         | \$ 8,315                    | \$ 36,732        |
| Payments                                                       | (2,742)              | (601)            | (2,391)                     | (5,734)          |
| Facility deferred rent reclassified to restructuring liability | —                    | 1,326            | —                           | 1,326            |
| Foreign currency translation adjustment                        | (30)                 | (8)              | 19                          | (19)             |
| Liability at December 31, 2016                                 | <u>\$ 18,480</u>     | <u>\$ 7,882</u>  | <u>\$ 5,943</u>             | <u>\$ 32,305</u> |

At December 31, 2016, \$27.6 million of the liability is included in accrued and other current liabilities and \$4.7 million is included in other long-term liabilities in the accompanying consolidated balance sheet.

### *2014 Restructuring*

During the fourth quarter of 2014, we recorded pretax charges of \$37.1 million in restructuring charges in connection with the acquisition of Enzymatics discussed in Note 5 "Acquisitions" and from the implementation of headcount reductions and facility consolidations to further streamline operations and various measures as part of a commitment to continuous improvement and related to QIAGEN's new strategic focus on its five growth drivers. Of these charges, \$26.4 million is recorded in cost of sales, \$2.4 million is recorded in sales and marketing, and \$8.3 million is recorded in general, administrative, integration and other. The pretax charge consists of \$6.4 million for workforce reductions, \$5.8 million for fixed asset abandonment charges, \$22.5 million for intangible asset abandonment charges in line with strategic initiatives to keep our activities technologically and

competitively current. Additionally, we incurred contract termination and consulting costs of \$2.4 million. No additional costs were incurred in 2015.

The following table summarizes the components of the 2014 restructuring costs. At December 31, 2016, no further amounts were payable under this restructuring program. At December 31, 2015, a restructuring accrual of \$4.1 million was included in other current liabilities.

| (in thousands)                          | Personnel<br>Related | Facility Related | Contract and<br>Other Costs | Total      |
|-----------------------------------------|----------------------|------------------|-----------------------------|------------|
| Balance at December 31, 2014            | \$ 6,341             | \$ 7,627         | \$ 652                      | \$ 14,620  |
| Payments                                | (4,789)              | (4,199)          | (418)                       | (9,406)    |
| Release of excess accrual               | (453)                | —                | (20)                        | (473)      |
| Foreign currency translation adjustment | (630)                | —                | —                           | (630)      |
| Balance at December 31, 2015            | \$ 469               | \$ 3,428         | \$ 214                      | \$ 4,111   |
| Total payments                          | \$ (143)             | \$ (3,428)       | \$ (214)                    | \$ (3,785) |
| Release of excess                       | \$ (325)             | \$ —             | \$ —                        | \$ (325)   |
| Translation                             | \$ (1)               | \$ —             | \$ —                        | \$ (1)     |
| Ending balance December 31, 2016        | \$ —                 | \$ —             | \$ —                        | \$ —       |

## 7. Available-for-sale Financial Assets

| (in thousands)                                         | 2016              | 2015              |
|--------------------------------------------------------|-------------------|-------------------|
| Current Available-for-sale financial assets:           |                   |                   |
| Unquoted debt securities                               | \$ 89,300         | \$ 127,143        |
| Term deposits and short-term funds                     | 3,699             | 3,674             |
| <b>Current Available-for-sale Financial Assets</b>     | <b>\$ 92,999</b>  | <b>\$ 130,817</b> |
| Non-current Available-for-sale financial instruments:  |                   |                   |
| Quoted equity securities                               | \$ 4,064          | \$ 3,485          |
| Unquoted equity securities                             | 38,173            | 17,169            |
| <b>Non-current Available-for-sale Financial Assets</b> | <b>\$ 42,237</b>  | <b>\$ 20,654</b>  |
| <b>Total Available-for-sale Financial Assets</b>       | <b>\$ 135,236</b> | <b>\$ 151,471</b> |

### *Unquoted Debt Securities*

At December 31, 2016 and 2015, we had \$89.3 million and \$127.1 million, respectively, of loan receivables and commercial paper due from financial institutions. These loan receivables and commercial paper are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are carried at fair market value, which is equal to the cost. At December 31, 2016, these loans consist of \$63.5 million and €24.5 million (\$25.8 million as of December 31, 2016) which mature at various dates through December 2018. All instruments that have an original tenor of more than 12 months but can be redeemed on at least a quarterly basis. Interest income is determined using the effective interest rate method. These loans are classified as current assets in the accompanying consolidated balance sheets since we may redeem the loans at our discretion.

### *Term Deposits and Short-Term Funds*

At December 31, 2016 and 2015, we also had €3.5 million (\$3.7 million) and €3.4 million (\$3.7 million), respectively in term deposits with final maturities until August 2017. The deposits can be withdrawn at the end of each quarter without penalty and are therefore classified as current assets in the accompanying consolidated balance sheets.

For the years ended December 31, 2016 and 2015, proceeds from sales of current available-for-sale financial assets totaled \$533.8 million and \$367.7 million, respectively, and purchases of current available-for-sale financial assets totaled \$496.3 million and \$317.6 million, respectively. During the year ended December 31, 2016 realized gains totaled \$1.4 million and during the year ended December 31, 2015, realized losses totaled \$6.0 million.

### *Quoted Equity Securities*

During 2016, we made an investment in HTG Molecular Diagnostics, Inc., a publicly traded company, that is classified as a non-current marketable security. At December 31, 2016, we held 833,333 shares with a fair market value of \$1.9 million and a

cost of \$2.0 million. Our former cost-method investment in Curetis AG was reclassified as a non-current marketable security during 2015 upon the completed IPO of its Dutch holding company, Curetis N.V. At December 31, 2016, we held 320,712 shares with a cost of \$2.3 million. As of December 31, 2016 and 2015, the fair market value of these shares was \$2.2 million and \$3.5 million, respectively. Non-current marketable securities are included in non-current available for sale financial instruments in the consolidated balance sheets.

#### *Unquoted Equity Securities*

At December 31, 2016 and 2015, we had a total of cost-method investments in non-publicly traded companies with carrying amounts of \$38.2 million and \$17.2 million, respectively, which are included in non-current available for sale assets in the consolidated balance sheets. During the years ended December 31, 2016, and 2015, we made new cost-method investments totaling \$20.5 million, and \$4.4 million, respectively. In August 2016, we converted a \$0.6 million short-term loan into additional ownership interest of a cost-method investment. In 2015, we recorded total impairments to a cost method investment of \$2.2 million in other operating expense. These cost-method investments are stated at acquisition cost as there are no active markets which provide reliable fair values. Changes in fair value of these cost-method investments are identified when there are events or changes in circumstances that may have a significant adverse effect on the fair value of the investment.

Movements in available-for-sale financial assets were as follows:

| <b>(in thousands)</b>                                               | <b>2016</b>              | <b>2015</b>              |
|---------------------------------------------------------------------|--------------------------|--------------------------|
| Available-for-sale financial assets as at January 1 <sup>st</sup>   | <b>\$ 151,471</b>        | <b>\$ 202,660</b>        |
| Unquoted equity securities acquired                                 | <b>20,455</b>            | 4,379                    |
| Unquoted equity securities sold                                     | —                        | (2,644)                  |
| Unquoted equity securities converted                                | <b>617</b>               | —                        |
| Disposals of unquoted equity securities                             | —                        | (2,189)                  |
| Quoted equity securities acquired                                   | <b>2,000</b>             | —                        |
| Unrealized (loss) gain on quoted equity securities                  | <b>(1,421)</b>           | 1,215                    |
| Unquoted debt securities acquired                                   | <b>496,304</b>           | 317,570                  |
| Unquoted debt securities sold                                       | <b>(533,847)</b>         | (367,714)                |
| Gain (loss) on sales of unquoted debt securities                    | <b>1,360</b>             | (6,039)                  |
| Translation                                                         | <b>(1,703)</b>           | 4,233                    |
| Available-for-sale financial assets as at December 31 <sup>st</sup> | <b><u>\$ 135,236</u></b> | <b><u>\$ 151,471</u></b> |

## **8. Trade Accounts Receivable**

| <b>(in thousands)</b>           | <b>2016</b>              | <b>2015</b>              |
|---------------------------------|--------------------------|--------------------------|
| Trade accounts receivable       | <b>\$ 272,325</b>        | <b>\$ 271,010</b>        |
| Allowance for doubtful accounts | <b>(7,614)</b>           | (7,255)                  |
| Notes receivable                | <b>13,533</b>            | 10,098                   |
| Trade Accounts Receivable       | <b><u>\$ 278,244</u></b> | <b><u>\$ 273,853</u></b> |

We sell our products worldwide through sales subsidiaries and distributors. There is no concentration of credit risk with respect to trade accounts receivable as we have a large number of internationally dispersed customers. Trade accounts receivable are non-interest bearing and mostly have payment terms of 30-90 days.

The following table provides a breakdown of trade accounts receivable which are neither past due nor impaired and which are past due but not impaired:

| <b>(in thousands)</b>     | <b>Carrying amount, net of allowance</b> | <b>Thereof neither past due nor impaired</b> | <b>Less than 30 days</b> | <b>Between 31 to 60 days</b> | <b>Between 61 to 90 days</b> | <b>More than 90 days</b> |
|---------------------------|------------------------------------------|----------------------------------------------|--------------------------|------------------------------|------------------------------|--------------------------|
| <b>December 31, 2016</b>  |                                          |                                              |                          |                              |                              |                          |
| Trade accounts receivable | <b><u>\$ 264,711</u></b>                 | \$ 167,845                                   | \$ 38,553                | \$ 15,777                    | \$ 10,019                    | \$ 32,517                |
| <b>December 31, 2015</b>  |                                          |                                              |                          |                              |                              |                          |
| Trade accounts receivable | <b><u>\$ 263,755</u></b>                 | \$ 158,174                                   | \$ 39,277                | \$ 18,260                    | \$ 11,960                    | \$ 36,084                |

The notes receivable represent a written promise from customers to pay definite amounts of money on specific future dates.

The following table shows the development of allowances on trade accounts receivable:

| (in thousands)                                      | 2016            | 2015            |
|-----------------------------------------------------|-----------------|-----------------|
| Provision for doubtful accounts as at January, 1st  | \$ 7,255        | \$ 8,847        |
| Additions (recognized as expense)                   | 2,135           | 2,093           |
| Write-offs                                          | (1,642)         | (2,022)         |
| Currency translation adjustments and other          | (134)           | (1,663)         |
| Provision for doubtful accounts as at December 31st | <u>\$ 7,614</u> | <u>\$ 7,255</u> |

All additions and write-offs relate to provisions for individual impairments.

## 9. Other Current and Non-current Assets

Other current assets at December 31, 2016 and 2015 consist of the following:

| (in thousands)                                  | 2016             | 2015             |
|-------------------------------------------------|------------------|------------------|
| Prepaid expenses and other                      | \$ 22,288        | \$ 25,543        |
| Value added tax                                 | 14,985           | 15,219           |
| Escrow in connection with acquisitions          | —                | 2,500            |
| Fair values of derivative financial instruments | 5,386            | 3,758            |
| Current lease receivables                       | 1,743            | 1,924            |
| Grant receivables                               | 808              | 668              |
| Other Current Assets                            | <u>\$ 45,210</u> | <u>\$ 49,612</u> |

Other non-current assets at December 31, 2016 and 2015 consist of the following:

| (in thousands)                                    | 2016             | 2015             |
|---------------------------------------------------|------------------|------------------|
| Non-current loans receivable with related parties | 12,108           | 7,177            |
| Prepaid licenses                                  | 10,727           | 13,705           |
| Other non-current assets                          | 8,385            | 8,597            |
| Prepayment of intangibles                         | 4,420            | 7,394            |
| Non-current deposits and escrow payments          | 4,033            | 705              |
| Other Non-current Assets                          | <u>\$ 39,673</u> | <u>\$ 37,578</u> |

## 10. Property, Plant and Equipment

| Cost (in thousands)      | Land and buildings      | Machinery and equipment  | Furniture and office equipment | Leasehold improvements  | Construction in progress | Total                    |
|--------------------------|-------------------------|--------------------------|--------------------------------|-------------------------|--------------------------|--------------------------|
| January 1, 2015          | \$283,116               | \$ 244,906               | \$ 86,555                      | \$ 32,667               | \$ 22,945                | \$ 670,189               |
| Currency adjustments     | (17,179)                | (20,464)                 | (4,968)                        | (1,866)                 | (917)                    | (45,394)                 |
| Additions                | 3,604                   | 31,910                   | 7,709                          | 1,620                   | 14,744                   | 59,587                   |
| Business combinations    | —                       | 214                      | 18                             | 45                      | —                        | 277                      |
| Disposals                | —                       | (8,186)                  | (2,639)                        | (2,403)                 | —                        | (13,228)                 |
| Transfers                | 15,428                  | 5,176                    | 5,605                          | 2,486                   | (28,695)                 | —                        |
| December 31, 2015        | <u>284,969</u>          | <u>253,556</u>           | <u>92,280</u>                  | <u>32,549</u>           | <u>8,077</u>             | <u>671,431</u>           |
| Currency adjustments     | <u>(4,948)</u>          | <u>(9,014)</u>           | <u>(2,205)</u>                 | <u>(1,894)</u>          | <u>(47)</u>              | <u>(18,108)</u>          |
| Additions                | <u>3,840</u>            | <u>23,469</u>            | <u>4,137</u>                   | <u>1,813</u>            | <u>7,474</u>             | <u>40,733</u>            |
| Business combinations    | —                       | 1,055                    | 397                            | 155                     | 102                      | 1,709                    |
| Disposals                | (254)                   | (16,121)                 | (7,195)                        | (544)                   | —                        | (24,114)                 |
| Transfers                | 1,103                   | 4,403                    | 2,146                          | 630                     | (8,282)                  | —                        |
| <b>December 31, 2016</b> | <b><u>\$284,710</u></b> | <b><u>\$ 257,348</u></b> | <b><u>\$ 89,560</u></b>        | <b><u>\$ 32,709</u></b> | <b><u>\$ 7,324</u></b>   | <b><u>\$ 671,651</u></b> |

  

| Depreciation (in thousands) | Land and buildings       | Machinery and equipment | Furniture and office equipment | Leasehold improvements | Construction in progress | Total                    |
|-----------------------------|--------------------------|-------------------------|--------------------------------|------------------------|--------------------------|--------------------------|
| January 1, 2015             | \$ (65,341)              | \$ (176,772)            | \$ (67,866)                    | \$ (24,286)            | —                        | \$ (334,265)             |
| Currency adjustments        | 4,860                    | 14,213                  | 3,786                          | 1,378                  | —                        | 24,237                   |
| Additions                   | (7,745)                  | (27,794)                | (7,811)                        | (1,855)                | —                        | (45,205)                 |
| Impairment losses           | —                        | (156)                   | —                              | —                      | —                        | (156)                    |
| Disposals                   | —                        | 6,223                   | 2,423                          | 1,325                  | —                        | 9,971                    |
| December 31, 2015           | <u>(68,226)</u>          | <u>(184,286)</u>        | <u>(69,468)</u>                | <u>(23,438)</u>        | <u>—</u>                 | <u>(345,418)</u>         |
| Currency adjustments        | <u>1,717</u>             | <u>8,746</u>            | <u>1,920</u>                   | <u>997</u>             | <u>—</u>                 | <u>13,380</u>            |
| Additions                   | <u>(8,056)</u>           | <u>(32,543)</u>         | <u>(8,362)</u>                 | <u>(2,023)</u>         | <u>—</u>                 | <u>(50,984)</u>          |
| Impairment losses           | —                        | (1,755)                 | (79)                           | (118)                  | —                        | (1,952)                  |
| Disposals                   | 194                      | 14,749                  | 6,595                          | 493                    | —                        | 22,031                   |
| December 31, 2016           | <u>(74,371)</u>          | <u>(195,089)</u>        | <u>(69,394)</u>                | <u>(24,089)</u>        | <u>—</u>                 | <u>(362,943)</u>         |
| Net book value              |                          |                         |                                |                        |                          |                          |
| December 31, 2015           | \$ 216,743               | \$ 69,270               | \$ 22,812                      | \$ 9,111               | \$ 8,077                 | \$ 326,013               |
| <b>December 31, 2016</b>    | <b><u>\$ 210,339</u></b> | <b><u>\$ 62,259</u></b> | <b><u>\$ 20,166</u></b>        | <b><u>\$ 8,620</u></b> | <b><u>\$ 7,324</u></b>   | <b><u>\$ 308,708</u></b> |

No property, plant and equipment were pledged as security against non-current financial debts at December 31, 2016 and 2015. The net carrying amount of property, plant and equipment under finance lease contracts, primarily buildings, amounts to \$1.9 million as of December 31, 2016 (2015: \$2.6 million). As of December 31, 2015, \$3.8 million was set aside in restricted cash for the purchase of two buildings in Hilden, Germany. Closing of the transaction occurred in the first quarter of 2016.

The asset's residual values, useful lives and methods of depreciation are reviewed, and adjusted if appropriate, at each financial year end. For the years ended December 31, 2016 and 2015, interest capitalized in connection with construction projects was not significant.

During the year ended December 31, 2016, we recorded \$2.0 million of impairment charges associated to the abandonment of certain projects in connection with the restructuring discussed more fully in Note 6. During the year ended December 31, 2015, \$0.2 million of impairment charges were recognized in general and administrative, integration and other expense in the accompanying consolidated income statement.

## 11. Investments in Associates and Joint Ventures

We have made strategic investments in certain companies that are accounted for using the equity method of accounting. The method of accounting for an investment depends on the level of influence. We monitor changes in circumstances that may require a reassessment of the level of influence. We periodically review the carrying value of these investments for impairment, considering factors such as the most recent stock transactions and book values from the recent financial statements.

Amounts from Equity-Accounted Investments considered in the financial statements are as follows:

| (\$ in thousands)                                           | Ownership Percentage | Equity investments as of December 31, |                  | Share of income (loss) for the years ended December 31, |               |
|-------------------------------------------------------------|----------------------|---------------------------------------|------------------|---------------------------------------------------------|---------------|
|                                                             |                      | 2016                                  | 2015             | 2016                                                    | 2015          |
| PreAnalytiX GmbH                                            | 50.00%               | \$ 3,519                              | \$ 10,627        | \$ 3,067                                                | \$ 1,878      |
| Biotype Innovation GmbH                                     | 24.90%               | 3,339                                 | 3,775            | (335)                                                   | (595)         |
| Pyrobett                                                    | 19.00%               | 2,444                                 | 2,111            | 333                                                     | (600)         |
| Hombrechtikon Systems Engineering AG                        | 19.00%               | 1,524                                 | —                | —                                                       | —             |
| QIAGEN (Suzhou) Institute of Translation Research Co., Ltd. | 30.00%               | —                                     | 203              | (244)                                                   | (107)         |
|                                                             |                      | <u>\$ 10,826</u>                      | <u>\$ 16,716</u> | <u>\$ 2,821</u>                                         | <u>\$ 576</u> |

As a QIAGEN representative has a board seat at Pyrobett at December 31, 2016, QIAGEN has significant influence. Accordingly, the investment in this company is recorded at equity in spite of the fact that QIAGEN's share is below 20%.

In connection with the restructuring activities discussed in Note 6, we transferred the research and development activities of our instrumentation business to a new company, Hombrechtikon Systems Engineering AG (HSE), in which we acquired a 19.0% interest for a total obligation of \$9.8 million which is payable over three years. As of December 31, 2016, \$3.9 million was included in other current liabilities and \$5.9 million was included in other non-current liabilities in the accompanying consolidated balance sheet. HSE is accounted for under the equity method as have significant influence but not control over the associate. In 2016, we recorded an impairment of the investment in HSE of \$8.3 million in (loss) gain from investments in associates and accordingly, as of December 31, 2016, the investment has a carrying value of \$1.5 million, which is included in other non-current assets in the consolidated balance sheets, representing our maximum exposure to loss. Due to the initial funding as discussed above in addition to the expected business activity with HSE, QIAGEN has significant influence. Accordingly, the investment in this company is recorded at equity in spite of the fact that QIAGEN's share is below 20%.

The below tables shows the changes in our equity-method investments in associates for the years ended December 31, 2016 and 2015:

| (in thousands)                                               | 2016             | 2015             |
|--------------------------------------------------------------|------------------|------------------|
| Investments in associates as at January 1st                  | \$ 16,716        | \$ 22,279        |
| Acquisition of shares                                        | 9,821            | 4,318            |
| Impairment                                                   | (8,299)          | —                |
| Dividend distribution received                               | (9,848)          | (10,729)         |
| Transfer to cost-method due to loss of significant influence | —                | (398)            |
| Share of profit / (loss)                                     | 2,821            | 576              |
| Exchange rate differences                                    | (385)            | 670              |
| Investments in associates as at December 31st                | <u>\$ 10,826</u> | <u>\$ 16,716</u> |

The following overview reflects 100% of the balances of the relating companies:

| (in millions)        | 2016    | 2015    |
|----------------------|---------|---------|
| Total assets         | \$ 55.3 | \$ 39.2 |
| Shareholders' equity | \$ 40.9 | \$ 31.5 |
| Net sales            | \$ 17.4 | \$ 15.4 |
| Net result           | \$ 6.5  | \$ 2.9  |

## 12. Goodwill and Other Intangible Assets

The changes in the carrying amount of goodwill for the years ended December 31, 2016 and 2015 are as follows:

| (in thousands)                           | 2016                | 2015                |
|------------------------------------------|---------------------|---------------------|
| Goodwill as at January 1 <sup>st</sup>   | \$ 1,901,646        | \$ 1,914,212        |
| Goodwill acquired during the year        | 76,807              | 37,084              |
| Purchase adjustments                     | 316                 | 1,656               |
| Disposals                                | (2,650)             | —                   |
| Currency adjustments                     | (24,459)            | (51,306)            |
| Goodwill as at December 31 <sup>st</sup> | <u>\$ 1,951,660</u> | <u>\$ 1,901,646</u> |

The changes in the carrying amount of goodwill during the years ended December 31, 2016 and 2015 resulted primarily from changes in foreign currency translation together with acquired goodwill from the 2016 acquisition of Exiqon and adjustments made in connection with the 2015 purchase price allocation for the acquisition of MO BIO Laboratories Inc. discussed in Note 5. Additionally, \$2.6 million of goodwill was disposed of in connection with the transfer of the research and development activities of our instrumentation business as part of the restructuring program discussed in Note 6. Accumulated goodwill impairment totaled \$1.6 million as of December 31, 2016 and 2015.

In the fourth quarter of 2016, we performed our annual impairment assessment of goodwill (using data as of October 1, 2016) in accordance with the provisions of IAS 36. No events or changes in circumstances indicated that the acquired goodwill might be impaired.

Management monitors and makes decisions regarding the Company's operations on a functional specific and global level. Therefore, we concluded that the goodwill impairment test needs to be performed on the level of the consolidated Group as a whole (one cash generating unit). In testing for potential impairment, we measured the estimated fair value of the cash generating unit based upon discounted future operating cash flows using a discount rate reflecting our estimated average cost of funds.

For impairment testing, the recoverable amount of goodwill allocated to the cash generating unit (higher of the cash generating unit's fair value less selling costs and its value in use) is compared to the carrying amount of the net assets employed (including goodwill) of the cash generating unit. Value in use is normally assumed to be higher than the fair value less selling costs; therefore, fair value less selling costs is only investigated when value in use is lower than the carrying amount of the cash generating unit.

#### *Key assumptions used in the value in use calculations*

The value in use is calculated based on estimated future cash flow projections expected to result from the use of the cash generating unit, discounted using an appropriate long-term pre-tax discount rate. The value in use calculations use cash flow projections based on financial budgets and models over the projection period (five years) as available for internal reporting purposes and in accordance with standard valuation practices. The growth rates used are based on industry growth forecasts for the projected period as well as for the subsequent period (long-term growth rate of 3% in 2016 and 2015). The discount rates used are based on the pre-tax weighted average cost of capital (2016: 6.80%; 2015: 7.00%) and are verified against external analyst reports.

#### *Sensitivity to changes in assumptions*

Changes in assumptions used in projecting future operating cash flows and cost of funds could have a significant impact on the determination of impairment amounts. In estimating future cash flows, we used our internal budgets. Our budgets were based on recent sales data for existing products, planned timing of new product launches or capital projects, and customer commitments related to new and existing products. These budgets also included assumptions of future production volumes and pricing. The calculation of value in use is most sensitive to discount rates and growth rates used.

Discount rates reflect management's estimate of the risks profile for the respective valuation object. The growth rates used are based on industry growth forecasts for the projected period as well as for the subsequent period.

We concluded that no impairment existed. We believe that any reasonably possible change in the key assumptions would not have an impact on reported goodwill. Even if our estimates of projected future cash flows in respect of discount and growth rates were too high by 10%, there would be no impact on the reported value of goodwill at December 31, 2016. Due to the numerous variables associated with our judgments and assumptions relating to the valuation of the cash generating unit and the effects of changes in circumstances affecting these valuations, both the precision and reliability of the resulting estimates are subject to uncertainty, and as additional information becomes known, we may change our estimates.

## Other Intangible Assets

| Cost (in thousands)   | Developed technology, patent and license rights | Computer software | Development costs | Other intellectual properties | Total        |
|-----------------------|-------------------------------------------------|-------------------|-------------------|-------------------------------|--------------|
| January 1, 2015       | \$ 1,019,947                                    | \$ 150,465        | \$ 107,106        | \$ 433,240                    | \$ 1,710,758 |
| Currency adjustments  | (39,586)                                        | (12,486)          | (5,021)           | (13,582)                      | (70,675)     |
| Additions             | 30,791                                          | 50,192            | 19,862            | 14,784                        | 115,629      |
| Business combinations | 3,950                                           | 99                | —                 | 19,262                        | 23,311       |
| Disposals             | (5,195)                                         | (7,126)           | —                 | (107)                         | (12,428)     |
| Transfers             | 20,832                                          | —                 | —                 | (20,832)                      | —            |
| December 31, 2015     | 1,030,739                                       | 181,144           | 121,947           | 432,765                       | 1,766,595    |
| Currency adjustments  | (17,771)                                        | (4,814)           | (2,772)           | (12,656)                      | (38,013)     |
| Additions             | 70,909                                          | 46,219            | 5,674             | 27                            | 122,829      |
| Business combinations | 20,006                                          | 655               | —                 | 3,373                         | 24,034       |
| Disposals             | (22,161)                                        | (7,041)           | (1,355)           | —                             | (30,557)     |
| Transfers             | —                                               | —                 | —                 | —                             | —            |
| December 31, 2016     | \$ 1,081,722                                    | \$ 216,163        | \$ 123,494        | \$ 423,509                    | \$ 1,844,888 |

| Amortization (in thousands) | Developed technology, patent and license rights | Computer software | Development costs | Other intellectual properties | Total        |
|-----------------------------|-------------------------------------------------|-------------------|-------------------|-------------------------------|--------------|
| January 1, 2015             | \$ (546,315)                                    | \$ (58,295)       | \$ (78,939)       | \$ (179,959)                  | \$ (863,508) |
| Currency adjustments        | 19,536                                          | 4,210             | 3,403             | 6,510                         | 33,659       |
| Additions                   | (92,906)                                        | (14,318)          | (7,398)           | (39,046)                      | (153,668)    |
| Impairment losses           | (95)                                            | (2,552)           | —                 | (110)                         | (2,757)      |
| Disposals                   | 5,195                                           | 6,742             | —                 | 107                           | 12,044       |
| December 31, 2015           | (614,585)                                       | (64,213)          | (82,934)          | (212,498)                     | (974,230)    |
| Currency adjustments        | 9,475                                           | 2,244             | 1,890             | 6,775                         | 20,384       |
| Additions                   | (97,605)                                        | (24,122)          | (9,312)           | (40,344)                      | (171,383)    |
| Impairment losses           | (21,423)                                        | (8,965)           | (1,304)           | —                             | (31,692)     |
| Disposals                   | 22,132                                          | 6,841             | 1,355             | —                             | 30,328       |
| December 31, 2016           | (702,006)                                       | (88,215)          | (90,305)          | (246,067)                     | (1,126,593)  |
| Net book value              |                                                 |                   |                   |                               |              |
| December 31, 2015           | 416,154                                         | 116,931           | 39,013            | 220,267                       | 792,365      |
| December 31, 2016           | \$ 379,716                                      | \$ 127,948        | \$ 33,189         | \$ 177,442                    | \$ 718,295   |

Amortization expense on intangible assets is included in the line items cost of sales, research and development expense, sales and marketing expense or general and administrative expense in the accompanying consolidated statements of income depending on the nature and use of the asset. In 2016, purchased intangibles amortization related to developed technology and patent and license rights acquired in a business combination is included in cost of sales in the amount of \$80.1 million (2015: \$84.5 million) and purchased intangibles amortization of trademarks and customer base acquired in a business combination is recorded in sales and marketing expense in the amount of \$39.1 million (2015: 38.7 million).

Amortization of capitalized development costs have been recorded to cost of sales in the amount of \$9.3 million in 2016 (2015: \$7.4 million).

In 2016, we recorded an intangible asset impairment charge of \$31.4 million related to the discontinuation of existing technologies in connection with the restructuring discussed more fully in Note 6. Of this charge, \$11.4 million is included in cost of sales, \$18.6 million is included in research and development and \$1.4 million is included in general and administrative, integration and other. Additionally during 2016, we recorded an abandonment charge of \$0.2 million in cost of sales related to the abandonment of another project. During 2015, we recorded intangible asset impairments of \$3.0 million in general and

administrative, integration and other expense and \$0.1 million in research and development expense in the accompanying consolidated income statement.

### 13. Provisions

For the years ended December 31, 2016 and 2015, provisions as per the accompanying consolidated statements of financial position totaled \$4.7 million and \$4.8 million, respectively, and included amounts related to our warranty and acquisition related provisions.

#### *Warranty provision*

We provide warranties on our products against defects in materials and workmanship generally for a period of one year. A provision for estimated future warranty costs is recorded in cost of sales at the time product revenue is recognized. Product warranty obligations are included in provisions in the accompanying consolidated statement of financial position. The changes in the carrying amount of warranty obligations are as follows:

| (in thousands)                                     | 2016            | 2015            |
|----------------------------------------------------|-----------------|-----------------|
| Warranty obligation as at January 1st              | \$ 2,637        | \$ 3,279        |
| Provision charged to cost of sales                 | 3,562           | 2,202           |
| Usage                                              | (2,936)         | (2,569)         |
| Adjustments to previously provided warranties, net | (424)           | (91)            |
| Currency translation                               | (60)            | (184)           |
| Warranty obligation as at December 31st            | <u>\$ 2,779</u> | <u>\$ 2,637</u> |

#### *Acquisition related cost*

The provision for acquisition and related costs primarily relates to personnel and consulting costs.

| (in thousands)                                | 2016            | 2015            |
|-----------------------------------------------|-----------------|-----------------|
| Acquisition related costs as at January 1st   | \$ 2,115        | \$ 1,547        |
| Provision charged to expenses                 | 8,780           | 4,423           |
| Usage                                         | (9,004)         | (3,831)         |
| Currency adjustments and other                | (6)             | (24)            |
| Acquisition related costs as at December 31st | <u>\$ 1,885</u> | <u>\$ 2,115</u> |

For all provisions it is expected that the respective amounts will be utilized in the next financial year.

### 14. Other Current and Non-current Liabilities

Other current liabilities at December 31, 2016 and 2015 consist of the following:

| (in thousands)                                  | 2016              | 2015              |
|-------------------------------------------------|-------------------|-------------------|
| Payroll and related accrued liabilities         | \$ 54,772         | \$ 52,036         |
| Accrued expenses                                | 54,818            | 47,032            |
| Deferred revenue                                | 44,629            | 49,812            |
| Restructuring                                   | 27,590            | 4,144             |
| Future license payments                         | 14,763            | —                 |
| Royalties                                       | 7,801             | 13,786            |
| Cash collateral liability                       | 6,984             | 7,826             |
| Accrued contingent consideration                | 2,957             | 6,995             |
| Accrued interest on non-current financial debt  | 4,239             | 4,239             |
| Current finance lease obligations               | 999               | 922               |
| Fair values of derivative financial instruments | 6,089             | 525               |
| Other current liabilities                       | <u>\$ 225,641</u> | <u>\$ 187,317</u> |

Other non-current liabilities at December 31, 2016 and 2015 consist of the following:

| (in thousands)                           | 2016             | 2015             |
|------------------------------------------|------------------|------------------|
| Future license payments                  | 40,269           | —                |
| Accrued expenses                         | 36,176           | 31,243           |
| Non-current employee benefit obligations | 8,072            | 7,273            |
| Accrued contingent consideration         | 5,797            | 10,684           |
| Restructuring                            | 4,713            | —                |
| Non-current finance lease obligation     | 1,556            | 2,420            |
| Deferred revenue                         | 823              | 1,487            |
| Other non-current liabilities            | <u>\$ 97,406</u> | <u>\$ 53,107</u> |

Please refer to Note 19 'Commitments and Contingencies' for additional information.

## 15. Financial Debts

Our credit facilities available and undrawn at December 31, 2016 total €436.6 million (approximately \$460.2 million). This includes a €400.0 million syndicated multi-currency revolving credit facility expiring December 2021 of which no amounts were utilized at December 31, 2016 or at December 31, 2015, and four other lines of credit amounting to €36.6 million with no expiration date, none of which were utilized as of December 31, 2016 or as of December 31, 2015. The €400.0 million facility can be utilized in Euro, British pounds sterling, Swiss franc or U.S. dollar and bears interest of 0.4% to 1.2% above three months EURIBOR, or LIBOR in relation to any loan not in euro, and is offered with interest periods of one, two, three or six months. The commitment fee is calculated based on 35% of the applicable margin. In 2016 and 2015, \$1.0 million and \$0.9 million of commitment fees were paid, respectively. The revolving facility agreement contains certain financial and non-financial covenants, including but not limited to, restrictions on the encumbrance of assets and the maintenance of certain financial ratios. We were in compliance with these covenants at December 31, 2016. The credit facilities are for general corporate purposes.

At December 31, 2016 and December 31, 2015, total long-term debt, net of debt issuance costs of \$8.1 million and \$10.6 million, respectively, consists of the following:

| (in thousands)                                                        | 2016                | 2015                |
|-----------------------------------------------------------------------|---------------------|---------------------|
| 3.19% Series A Senior Notes due 2019                                  | \$ 72,849           | \$ 72,796           |
| 3.75% Series B Senior Notes due 2022                                  | 299,106             | 298,952             |
| 3.90% Series C Senior Notes due 2024                                  | 26,910              | 26,898              |
| 0.375 % Senior Unsecured Cash Convertible Notes due 2019              | 402,806             | 391,111             |
| 0.875% Senior Unsecured Cash Convertible Notes due 2021               | 262,370             | 254,284             |
| Other notes payable bearing interest up to 6.28% and due through 2015 | —                   | —                   |
| Total current and non-current financial debts                         | <u>1,064,041</u>    | <u>1,044,041</u>    |
| Less: current portion of financial debts                              | —                   | —                   |
| Total non-current financial debts                                     | <u>\$ 1,064,041</u> | <u>\$ 1,044,041</u> |
| Total amount secured                                                  | —                   | —                   |
| Unused lines of credit for short-term financing                       | 460,220             | 475,326             |

The notes are all unsecured obligations that rank pari passu. Interest expense on non-current debt was \$35.8 million for the year ended December 31, 2016 (2015: \$34.5 million).

Future maturities (stated at the carrying values) and future interest as of December 31, 2016 and 2015 is as follows:

| As of December 31, 2016<br>(in thousands) | Carrying value      | Loans (fixed and<br>floating-rate) | Convertible notes<br>(fixed-rate) | Total future<br>contractual cash<br>obligations |
|-------------------------------------------|---------------------|------------------------------------|-----------------------------------|-------------------------------------------------|
| 2017                                      | \$ —                | \$ 14,632                          | \$ 4,238                          | \$ 18,870                                       |
| 2018                                      | —                   | 14,632                             | 4,238                             | 18,870                                          |
| 2019                                      | 475,655             | 86,994                             | 405,785                           | 492,779                                         |
| 2020                                      | —                   | 12,303                             | 2,625                             | 14,928                                          |
| 2021                                      | 262,371             | 12,303                             | 262,946                           | 275,249                                         |
| Thereafter                                | 326,015             | 337,860                            | —                                 | 337,860                                         |
| <b>Total financial debts 2016</b>         | <b>\$ 1,064,041</b> | <b>\$ 478,724</b>                  | <b>\$ 679,832</b>                 | <b>\$ 1,158,556</b>                             |

| As of December 31, 2015<br>(in thousands) | Carrying value      | Loans (fixed and<br>floating-rate) | Convertible notes<br>(fixed-rate) | Total future<br>contractual cash<br>obligations |
|-------------------------------------------|---------------------|------------------------------------|-----------------------------------|-------------------------------------------------|
| 2016                                      | \$ —                | \$ 14,632                          | \$ 4,238                          | \$ 18,870                                       |
| 2017                                      | —                   | 14,632                             | 4,238                             | 18,870                                          |
| 2018                                      | —                   | 14,632                             | 4,238                             | 18,870                                          |
| 2019                                      | 463,907             | 86,943                             | 394,089                           | 481,032                                         |
| 2020                                      | —                   | 12,303                             | 2,625                             | 14,928                                          |
| Thereafter                                | 580,134             | 349,999                            | 254,860                           | 604,859                                         |
| <b>Total financial debts 2015</b>         | <b>\$ 1,044,041</b> | <b>\$ 493,141</b>                  | <b>\$ 664,288</b>                 | <b>\$ 1,157,429</b>                             |

#### ***Cash Convertible Notes due 2019 and 2021***

On March 19, 2014, we issued \$730.0 million aggregate principal amount of Cash Convertible Senior Notes of which \$430.0 million is due in 2019 (2019 Notes) and \$300.0 million is due in 2021 (2021 Notes). We refer to the 2019 Notes and 2021 Notes, collectively as the “Cash Convertible Notes”. The aggregate net proceeds of the Cash Convertible Notes was \$680.7 million, after payment of the net cost of the Call Spread Overlay described below and transaction costs.

Interest on the Cash Convertible Notes is payable semiannually in arrears on March 19 and September 19 of each year, at rates of 0.375% and 0.875% per annum for the 2019 Notes and 2021 Notes, respectively, commencing September 19, 2014. The 2019 Notes will mature on March 19, 2019 and the 2021 Notes will mature on March 19, 2021, unless repurchased or converted in accordance with their terms prior to such date.

The Cash Convertible Notes are convertible into cash in whole, but not in part, at the option of noteholders in the following circumstances: (a) from April 29, 2014 through September 18, 2018 for the 2019 Notes, and September 18, 2020 for the 2021 Notes (Contingent Conversion Period), under any of the Contingent Conversion Conditions and (b) at any time following the Contingent Conversion Period through the fifth business day immediately preceding the applicable maturity Date. Upon conversion, noteholders will receive an amount in cash equal to the Cash Settlement Amount, calculated as described below. The Cash Convertible Notes are not convertible into shares of our common stock or any other securities.

Noteholders may convert their Cash Convertible Notes into cash at their option at any time during the Contingent Conversion Period only under the following circumstances (Contingent Conversion Conditions):

- during any calendar quarter commencing after the calendar quarter ending on March 31, 2014 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day;
- if we undergo certain fundamental changes as defined in the agreement;
- during the five business day period immediately after any ten consecutive trading day period in which the quoted price for the 2019 Notes or the 2021 Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day;
- if we elect to distribute assets or property to all or substantially all of the holders of our common stock and those assets or other property have a value of more than 25% of the average daily volume-weighted average trading price of our common stock for the prior 20 consecutive trading days;
- if we elect to redeem the Cash Convertible Notes; or
- if we experience certain customary events of default, including defaults under certain other indebtedness.

As adjusted by the synthetic share repurchase discussed in Note 17, the conversion rate is 7,063.1647 shares of our common stock per \$200,000 principal amount of Cash Convertible Notes (reflecting an initial conversion price of approximately \$28.32 per share of common stock). Upon conversion, holders are entitled to a cash payment (Cash Settlement Amount) equal to the average of the conversion rate multiplied by the daily volume-weighted average trading price for our common stock over a 50-day period. The conversion rate is subject to adjustment in certain instances but will not be adjusted for any accrued and unpaid interest. In addition, following the occurrence of certain corporate events that may occur prior to the applicable maturity date, we may be required to pay a cash make-whole premium by increasing the conversion rate for any holder who elects to convert Cash Convertible Notes in connection with the occurrence of such a corporate event.

We may redeem the 2019 Notes or 2021 Notes in their entirety at a price equal to 100% of the principal amount of the applicable Cash Convertible Notes plus accrued interest at any time when 20% or less of the aggregate principal amount of the applicable Cash Convertible Notes originally issued remain outstanding.

Because the Cash Convertible Notes contain an embedded cash conversion option, we have determined that the embedded cash conversion option is a derivative financial instrument, which is required to be separated from the Cash Convertible Notes and accounted for separately as a derivative liability, with changes in fair value reported in our consolidated statements of operations until the cash conversion option transaction settles or expires. The initial fair value liability of the embedded cash conversion option was \$105.2 million, which simultaneously reduced the carrying value of the Cash Convertible Notes (effectively an original issuance discount). For further discussion of the derivative financial instruments relating to the Cash Convertible Notes, refer to Note 24.

As noted above, the reduced carrying value on the Cash Convertible Notes resulted in a debt discount that is amortized to the principal amount through the recognition of non-cash interest expense over the expected life of the debt, which is five and seven years for the 2019 Notes and 2021 Notes, respectively. This resulted in our recognition of interest expense on the Cash Convertible Notes at an effective rate approximating what we would have incurred had nonconvertible debt with otherwise similar terms been issued. The effective interest rate of the 2019 and 2021 Notes is 2.937% and 3.809%, respectively, which is imputed based on the amortization of the fair value of the embedded cash conversion option over the remaining term of the Cash Convertible Notes. As of December 31, 2016, we expect the 2019 Notes to be outstanding until their 2019 maturity date and the 2021 Notes to be outstanding until their 2021 maturity date, for remaining amortization periods of approximately five and seven years, respectively. Based on an estimation using available over-the-counter market information on the Cash Convertible Notes, the fair value of the 2019 Notes was \$485.9 million and \$495.5 million and the fair value of the 2021 Notes was \$349.6 million and \$356.1 million, at December 31, 2016 and 2015, respectively.

In connection with the issuance of the Cash Convertible Notes, we incurred approximately \$13.1 million in transaction costs. Such costs have been allocated to the Cash Convertible Notes and are being amortized over the terms of the Cash Convertible Notes.

Interest expense related to the Cash Convertible Notes was comprised of the following:

| (in thousands)                                               | Year-Ended<br>December 31, |                  |
|--------------------------------------------------------------|----------------------------|------------------|
|                                                              | 2016                       | 2015             |
| Coupon interest                                              | \$ 4,238                   | \$ 4,238         |
| Amortization of original issuance discount                   | 17,503                     | 16,935           |
| Amortization of debt issuance costs                          | 2,279                      | 2,220            |
| Total interest expense related to the Cash Convertible Notes | <u>\$ 24,020</u>           | <u>\$ 23,393</u> |

#### ***Cash Convertible Notes Call Spread Overlay***

Concurrent with the issuance of the Cash Convertible Notes, we entered into privately negotiated hedge transactions (Call Options) with, and issued warrants to purchase shares of our common stock (Warrants) to, certain financial institutions. We refer to the Call Options and Warrants collectively as the “Call Spread Overlay”. The Call Options are intended to offset any cash payments payable by us in excess of the principal amount due upon any conversion of the Cash Convertible Notes. We used \$105.2 million of the proceeds from the issuance of the Cash Convertible Notes to pay for the Call Options, and simultaneously received \$69.4 million from the sale of the Warrants, for a net cash outlay of \$35.8 million for the Call Spread Overlay. The Call Options and Warrants are derivative financial instruments and are discussed further in Note 24.

Aside from the initial payment of a premium of \$105.2 million for the Call Option, we will not be required to make any cash payments under the Call Options, and will be entitled to receive an amount of cash, generally equal to the amount by which the market price per share of our common stock exceeds the exercise price of the Call Options during the relevant valuation period. The exercise price under the Call Options is initially equal to the conversion price of the Cash Convertible Notes.

The Warrants cover an aggregate of 25.8 million shares of our common stock (subject to anti-dilution adjustments under certain circumstances) and have an initial exercise price of \$32.085 per share, subject to customary adjustments. The Warrants expire as follows: Warrants to purchase 15.2 million shares expire over a period of 50 trading days beginning on December 27, 2018 and Warrants to purchase 10.6 million shares expire over a period of 50 trading days beginning on December 29, 2020. The Warrants are European-style (exercisable only upon expiration). The Warrants could have a dilutive effect to the extent that the price of our common stock exceeds the applicable strike price of the Warrants. For each Warrant that is exercised, we will deliver to the holder a number of shares of our common stock equal to the amount by which the settlement price exceeds the exercise price, divided by the settlement price, plus cash in lieu of any fractional shares. We will not receive any proceeds if the Warrants are exercised.

### **Private Placement**

In October 2012, we completed a private placement through the issuance of new senior unsecured notes at a total amount of \$400.0 million with a weighted average interest rate of 3.66% (settled on October 16, 2012). The notes were issued in three series: (1) \$73.0 million 7-year term due in 2019 (3.19%); (2) \$300.0 million 10-year term due in 2022 (3.75%); and (3) \$27.0 million 12-year term due in 2024 (3.90%). We paid \$2.1 million in debt issue costs which will be amortized through interest expense over the lifetime of the notes. Approximately €170 million (approximately \$220 million) of proceeds from the notes were used to repay amounts outstanding under our short-term revolving credit facility in 2012. The remainder of the proceeds provides additional resources to support QIAGEN's longer-term business expansion. The note purchase agreement contains certain financial and non-financial covenants, including but not limited to, restrictions on priority indebtedness and the maintenance of certain financial ratios. Based on an estimation using the changes in the U.S. Treasury rates, the Level 2 fair value of these senior notes as of December 31, 2016 and December 31, 2015 was approximately \$397.1 million and \$399.3 million, respectively.

### **2004 Notes**

In August 2004, the Company completed the sale of \$150.0 million principal amount of 1.50% convertible unsubordinated notes (2004 Notes) due 2024. Interest on the 2004 Notes was payable semi-annually in February and August. The 2004 Notes were issued at 100% of principal value, and were convertible into 11.5 million shares of common shares at the option of the holder upon the occurrence of certain events at a price of \$12.6449 per share, subject to adjustment. During 2015, we redeemed the 2004 Notes for \$250.5 million and recognized a gain of \$2.5 million in other financial expense, net. The repayment amount was allocated to the loan and conversion feature on a relative fair value basis with \$123.1 million recorded against share premium.

## **16. Income Tax**

Major components of income tax expense as presented in the income statement for the years ended December 31, 2016 and 2015, are:

| <b>(in thousands)</b>                                         | <b>2016</b> | <b>2015</b> |
|---------------------------------------------------------------|-------------|-------------|
| Current income tax charge                                     | \$ 42,248   | \$ 40,796   |
| Adjustment in respect of current income tax of previous years | 1,411       | (1,201)     |
| Current income tax                                            | 43,659      | 39,595      |
| Relating to origination and reversal of temporary differences | (60,189)    | (23,035)    |
| Relating to changes in tax rates                              | 399         | (836)       |
| Deferred Income Tax                                           | (59,790)    | (23,871)    |
| Total Income Tax                                              | \$ (16,131) | \$ 15,724   |

Deferred tax related to items charged or credited directly to equity during 2016 and 2015 shown in the statement of comprehensive income (loss) totaled \$2.6 million and \$1.1 million, respectively.

The applicable statutory income tax rate in The Netherlands was 25% in 2016 and in 2015. The principal items comprising the differences between income taxes computed at the Netherlands statutory rate and the effective tax rate for the years ended December 31, 2016 and 2015 is as follows:

| (in thousands)                                     | 2016        |          | 2015       |         |
|----------------------------------------------------|-------------|----------|------------|---------|
|                                                    | Amount      | Percent  | Amount     | Percent |
| Income before Tax                                  | \$ 33,146   | —        | \$ 148,096 | —       |
| At Dutch statutory income tax rate of 25.0%        | 8,286       | 25.0 %   | 37,024     | 25.0 %  |
| Taxation of foreign operations, net <sup>(1)</sup> | (43,265)    | (130.5)% | (36,268)   | (24.5)% |
| Income taxes related to prior years                | 1,411       | 4.3 %    | (1,201)    | (0.8)%  |
| Changes in tax rates impacting deferred taxes      | 399         | 1.2 %    | (836)      | (0.6)%  |
| Tax impact from non-deductible items               | 14,438      | 43.6 %   | 20,455     | 13.8 %  |
| Tax impact from tax exempt income <sup>(2)</sup>   | 1,374       | 4.1 %    | (5,810)    | (3.9)%  |
| Other                                              | 1,226       | 3.7 %    | 2,360      | 1.6 %   |
| Total Income Tax                                   | \$ (16,131) | (48.6)%  | \$ 15,724  | 10.6 %  |

- (1) Our effective tax rate reflects the benefit of our global operations where certain income or loss is taxed at rates higher or lower than The Netherlands' statutory rate of 25% as well as the benefit of some income being partially exempt from income taxes due to various intercompany operating and financing activities. The most significant tax benefits from these foreign operations and financing activities are attributable to subsidiaries in Germany, Singapore, Switzerland, Ireland and Luxembourg. These foreign tax benefits are due to a combination of favorable tax laws, rules, rulings, and exemptions in these jurisdictions. Additionally, in 2016, certain foreign jurisdictions (primarily Germany and the United States), we recorded acquisition related and impairment charges which reduced pretax income in these higher tax jurisdictions.
- (2) In 2015, tax exempt income includes non-taxable income in The Netherlands related to the repurchase of the 2004 Notes, non-taxable income in the U.S. from the release of contingent consideration accruals and non-taxable dividend income in Switzerland. In 2016, tax-exempt income includes nontaxable income in the U.S. from the release of contingent consideration accruals and nontaxable dividend income in Switzerland.

We conduct business globally and, as a result, file numerous consolidated and separate income tax returns in the Netherlands, Germany, Switzerland and the U.S. federal jurisdiction, as well as in various other state and foreign jurisdictions. In the normal course of business, we are subject to examination by taxing authorities throughout the world. Tax years in the Netherlands are open since 2004 for income tax examinations by tax authorities. Our subsidiaries, with few exceptions, are no longer subject to income tax examinations by tax authorities for years before 2012. The U.S. consolidated group is subject to federal and most state income tax examinations by tax authorities beginning the year ending December 31, 2013 through the current period.

Starting in February 2014, the U.S. tax authorities (Internal Revenue Service) have been auditing our U.S. federal tax returns for 2011 and 2012. The audit was closed in 2016 without any proposed tax adjustments. As a result, we released \$6.6 million of unrecognized tax benefit due to closure of the tax audit. Additionally, in February 2016 German tax authorities began the audit of the German tax returns for the 2010-2013 tax years. This audit is currently in process and we expect the audit to close during 2017.

In early 2015, we received a confirmation from the relevant tax authorities, which resulted in a release of \$3.0 million reserve in the first quarter of 2015.

Changes in the gross amount of unrecognized tax benefits are as follows:

| (in thousands)                                               | Unrecognized Tax<br>Benefits |
|--------------------------------------------------------------|------------------------------|
| BALANCE AT DECEMBER 31, 2014                                 | \$ 16,002                    |
| Additions based on tax positions related to the current year | 2,018                        |
| Additions for tax positions of prior years                   | 2,640                        |
| Settlements with taxing authorities                          | (2,988)                      |
| Reductions due to lapse of statute of limitations            | (747)                        |
| Decrease from currency translation                           | (190)                        |
| BALANCE AT DECEMBER 31, 2015                                 | \$ 16,735                    |
| Additions based on tax positions related to the current year | 4,218                        |
| Additions for tax positions of prior years                   | 5,162                        |
| Decrease for tax position of prior years                     | (6,796)                      |
| Settlements with taxing authorities                          | —                            |
| Reductions due to lapse of statute of limitations            | (288)                        |
| Decrease from currency translation                           | (737)                        |
| BALANCE AT DECEMBER 31, 2016                                 | \$ 18,294                    |

At December 31, 2016 and 2015, our net unrecognized tax benefits totaled approximately \$18.3 million and \$16.7 million, respectively, of which \$18.3 million and \$16.7 million in benefits, if recognized, would favorably affect our effective tax rate in any future period. It is reasonably possible that approximately \$5.8 million of the unrecognized tax benefits may be released during the next 12 months due to lapse of statute of limitations or settlements with tax authorities; however, various events could cause our current expectations to change in the future. The above unrecognized tax benefits, if ever recognized in the financial statements, would be recorded in the statement of income as part of the income tax expense.

Our policy is to recognize interest accrued related to unrecognized tax benefits in interest expense and penalties within tax expense. For the years ended, December 31, 2016 and 2015, we have net interest expense and penalties of \$0.1 million and \$0.3 million, respectively. At December 31, 2016 and 2015, we have accrued interest of \$1.5 million and \$1.4 million, respectively.

We have recorded net deferred tax asset of \$44.0 million and had deferred tax liability of \$20.2 million at December 31, 2016 and 2015, respectively. The components of the net deferred asset and liability at December 31, 2016 and December 31, 2015 are as follows:

| (in thousands)                             | 2016               | 2015               | Change             |
|--------------------------------------------|--------------------|--------------------|--------------------|
| Accrued liabilities                        | \$ 24,663          | \$ 22,648          | \$ 2,015           |
| Equity awards                              | 24,558             | 27,335             | (2,777)            |
| Inventories                                | 25,462             | 24,987             | 475                |
| Tax credits                                | 915                | 1,110              | (195)              |
| NOL carry forward                          | 41,116             | 22,068             | 19,048             |
| Currency revaluation                       | 3,474              | 934                | 2,540              |
| Intangibles                                | 586                | 272                | 314                |
| Capital lease                              | 830                | 1,793              | (963)              |
| Allowance for bad debts                    | 1,060              | 1,121              | (61)               |
| Depreciation and amortization              | 2,096              | 1,859              | 237                |
| Convertible debt                           | 12,313             | 13,765             | (1,452)            |
| Deferred interest deduction                | 76,793             | 54,307             | 22,486             |
| Other                                      | 2,652              | 2,080              | 572                |
| Offsetting                                 | (121,315)          | (169,573)          | 48,258             |
| <b>Deferred Tax Asset</b>                  | <b>95,203</b>      | <b>4,706</b>       | <b>90,497</b>      |
| Intangibles                                | (148,222)          | (162,933)          | 14,711             |
| Depreciation and amortization              | (19,733)           | (27,854)           | 8,121              |
| Currency revaluation                       | (73)               | (132)              | 59                 |
| Inventories                                | (1,567)            | (1,060)            | (507)              |
| Unremitted profits earnings                | (923)              | (902)              | (21)               |
| Allowance for bad debts                    | (451)              | (465)              | 14                 |
| Other                                      | (1,507)            | (1,154)            | (353)              |
| Offsetting                                 | 121,315            | 169,573            | (48,258)           |
| <b>Deferred Tax (Liability)</b>            | <b>\$ (51,161)</b> | <b>\$ (24,927)</b> | <b>\$ (26,234)</b> |
| <b>Net Deferred Tax Asset/ (Liability)</b> | <b>\$ 44,042</b>   | <b>\$ (20,221)</b> | <b>\$ 64,263</b>   |

The movement in deferred income tax assets and liabilities during the year is as follows:

| (in thousands)                                          | 2016             | 2015             |
|---------------------------------------------------------|------------------|------------------|
| Change in deferred tax recognized in income             | \$ 59,790        | \$ 23,871        |
| Change in deferred tax related to business combinations | (5,087)          | (2,173)          |
| Change in deferred tax recognized in equity             | 9,559            | 15,021           |
| Change in Deferred Tax                                  | <u>\$ 64,262</u> | <u>\$ 36,719</u> |

At December 31, 2016 and 2015, we had \$364.4 million and \$249.7 million in total foreign net operating loss (NOL) carryforwards. Included in these amounts at December 31, 2016 and 2015, we had \$109.2 million and \$110.3 million of U.S. federal (NOL) carryforwards. At December 31, 2016, the entire NOLs in the U.S. are subject to limitations under Section 382 of the Internal Revenue Code. The NOLs in the U.S. will expire beginning December 31, 2022 through December 31, 2032. Also included in the above amount as of December 31, 2016 and 2015, were other foreign NOL carryforwards totaling approximately \$255.2 million and \$139.4 million, respectively, with \$41.9 million of additional NOL added due to acquisitions and \$56.4 million added due to German trade tax loss generated in 2016. As of December 31, 2016, we had NOL carryforwards in Germany of \$157.4 million predominantly trade tax NOLs. Of the total \$255.2 million NOL carryforward, a portion of the foreign NOLs will be expiring beginning December 2017.

As of December 31, 2016, a deferred tax liability has not been recognized for residual Netherlands income taxes on the undistributed earnings of the majority of our foreign subsidiaries as these earnings are considered to be either indefinitely reinvested or can be repatriated tax free under the Dutch participation exemption. The indefinitely reinvested earnings retained by subsidiaries amounted to \$343.9 million at December 31, 2016. Estimating the amount of the unrecognized deferred tax liability on indefinitely reinvested foreign earnings is not practicable. Should the earnings be remitted as dividends, we may be subject to taxes including withholding tax. We have \$21.4 million of undistributed earnings that we do not consider permanently reinvested and have recorded deferred income taxes or withholding taxes at December 31, 2016 and December 31, 2015, of approximately \$0.9 million.

## **17. Equity**

### ***Retained Earnings***

At the Annual General Meeting of Shareholders on June 21, 2017, the Board of Directors will propose to carry forward the profit for the year of QIAGEN N.V., the holding company of the Group, which is determined in accordance with the legal provisions of the Dutch Civil Code.

### ***Synthetic Share Repurchase***

In January 2017, we completed a synthetic share repurchase that combined a direct capital repayment with a reverse stock split. The transaction was announced in August 2016 and involved an approach used by various large, multinational Dutch companies to provide returns to all shareholders in a faster and more efficient manner than traditional open-market purchases. \$244.0 million was returned to shareholders through the transaction, which reduced the total number of issued common shares by approximately 3.7% to 230.8 million (of which 4.95 million in treasury) as of January 31, 2017.

### ***Share Repurchase Programs***

We announced our first share buyback program in 2012 and in 2013, we announced a second share buyback program, to purchase another \$100.0 million of our common shares (excluding transaction costs). We completed the share repurchase program in June 2014 having repurchased between September 2013 and June 2014 a total of approximately 4.4 million QIAGEN shares were repurchased for a total aggregate cost of \$100.4 million (including performance fees), under this program.

In July 2014, we announced the launch of our third share repurchase program to purchase up to another \$100 million of our common shares (excluding transaction costs). In 2014, 2.1 million QIAGEN shares were repurchased for \$49.1 million (excluding transaction costs) and in 2015, 0.8 million QIAGEN shares were repurchased for \$20.8 million.

In connection with the synthetic share repurchase program discussed above, we announced additional share repurchases to take place via the open market during the remainder of 2017, with a view to return to our shareholders an aggregate amount of \$300 million in 2017, including the amounts already returned via the synthetic share repurchase. The cost of repurchased shares is included in treasury stock and reported as a reduction in total equity when a repurchase occurs. Repurchased shares will be held in treasury in order to satisfy various obligations, which include the warrants issued in connection with the issuance of our Cash Convertible Notes discussed above and employee share-based remuneration plans.

## **18. Earnings per Common Share**

We present basic and diluted earnings per share. Basic earnings per share is calculated by dividing the net income attributable to the owners of QIAGEN N.V. by the weighted average number of common shares outstanding. Diluted earnings per share reflect the potential dilution that would occur if all “in the money” securities to issue common shares were exercised. In 2016 and 2015, the effect of the convertible bonds (discussed in Note 15) was excluded from calculating diluted earnings per share as it was antidilutive.

The following schedule summarizes the information used to compute earnings per common share:

| (in thousands, except per share data)                                                        | Years ended December 31, |                   |
|----------------------------------------------------------------------------------------------|--------------------------|-------------------|
|                                                                                              | 2016                     | 2015              |
| Net income attributable to the owners of QIAGEN N.V.                                         | <u>\$ 49,378</u>         | <u>\$ 132,618</u> |
| Weighted average number of common shares used to compute basic net income per common share   | <u>234,800</u>           | 233,483           |
| Dilutive effect of stock options and awards                                                  | <u>4,193</u>             | 3,539             |
| Weighted average number of common shares used to compute diluted net income per common share | <u>238,993</u>           | <u>237,022</u>    |
| Outstanding options and awards having no dilutive effect, not included in above calculation  | <u>210</u>               | <u>37</u>         |
| Basic earnings per common share attributable to the owners of QIAGEN N.V.                    | <u>\$ 0.21</u>           | <u>\$ 0.57</u>    |
| Diluted earnings per common share attributable to the owners of QIAGEN N.V.                  | <u>\$ 0.21</u>           | <u>\$ 0.56</u>    |

## 19. Commitments and Contingencies

### *Lease commitments*

We lease facilities and equipment under operating lease arrangements expiring in various years through 2024. Certain rental commitments provide for escalating rental payments or have renewal options extending through various years. Certain facility and equipment leases constitute finance leases expiring in various years through 2020. The accompanying consolidated financial statements include the assets and liabilities arising from these capital lease obligations. Rent expense under non-cancelable operating lease agreements was \$29.6 million in 2016 and \$23.2 million in 2015.

Minimum future obligations under finance and operating leases at December 31, 2016, are as follows:

| (in thousands)                                                  | Finance Leases | Operating Leases |
|-----------------------------------------------------------------|----------------|------------------|
| 2017                                                            | \$ 1,114       | \$ 13,338        |
| 2018                                                            | 1,534          | 9,292            |
| 2019                                                            | 59             | 6,121            |
| 2020                                                            | 12             | 3,752            |
| 2021                                                            | —              | 3,409            |
| Thereafter                                                      | —              | 2,690            |
| Total minimum lease obligations at December 31, 2016            | 2,719          | \$ 38,602        |
| Less: amount representing interest                              | (164)          |                  |
| Less: current portion                                           | (999)          |                  |
| Present value of minimum lease obligations at December 31, 2016 | \$ 1,556       |                  |

The information for the comparative period is provided below:

| (in thousands)                                                  | Finance Leases | Operating Leases |
|-----------------------------------------------------------------|----------------|------------------|
| 2016                                                            | \$ 1,307       | \$ 18,166        |
| 2017                                                            | 1,212          | 12,894           |
| 2018                                                            | 1,505          | 8,207            |
| 2019                                                            | —              | 5,878            |
| 2020                                                            | —              | 4,376            |
| Thereafter                                                      | —              | 4,923            |
| Total minimum lease obligations at December 31, 2015            | 4,024          | \$ 54,444        |
| Less: amount representing interest                              | (682)          |                  |
| Less: current portion                                           | (922)          |                  |
| Present value of minimum lease obligations at December 31, 2015 | \$ 2,420       |                  |

### *Licensing and Purchase Commitments*

We have licensing agreements with companies, universities and individuals, some of which require certain up-front payments. Royalty payments are required on net product sales ranging from one to 25 percent of covered products or based on quantities sold. Several of these agreements have minimum royalty requirements. The accompanying consolidated financial statements include accrued royalties relating to these agreements in the amount of \$7.8 million and \$13.8 million at December 31, 2016 and 2015, respectively. Royalty expense relating to these agreements amounted to \$35.9 million and \$43.2 million, for the years ended December 31, 2016 and 2015, respectively. Royalty expense is primarily recorded in cost of sales, with a small portion recorded as research and development expense depending on the use of the technology under license. Some of these agreements also have minimum raw material purchase requirements and requirements to perform specific types of research.

At December 31, 2016, we had commitments to purchase goods or services, and for future minimum guaranteed royalties. They are as follows:

| (in thousands)                                                | Purchase<br>Commitments | License & Royalty<br>Commitments |
|---------------------------------------------------------------|-------------------------|----------------------------------|
| 2017                                                          | \$ 61,643               | \$ 15,969                        |
| 2018                                                          | 19,824                  | 11,562                           |
| 2019                                                          | 12,257                  | 10,702                           |
| 2020                                                          | 891                     | 10,438                           |
| 2021                                                          | 661                     | 8,066                            |
| Thereafter                                                    | —                       | 8,765                            |
| Total licensing and purchase commitments at December 31, 2016 | <u>\$ 95,276</u>        | <u>\$ 65,502</u>                 |

As of December 31, 2016, future license payments of \$14.8 million and \$40.3 million are included in other current liabilities and other non-current liabilities, respectively.

The information for the comparative period is provided below:

| (in thousands)                                                | Purchase<br>Commitments | License & Royalty<br>Commitments |
|---------------------------------------------------------------|-------------------------|----------------------------------|
| 2016                                                          | \$ 67,609               | \$ 1,333                         |
| 2017                                                          | 15,970                  | 1,277                            |
| 2018                                                          | 8,453                   | 1,221                            |
| 2019                                                          | 7,044                   | 1,151                            |
| 2020                                                          | 136                     | 1,151                            |
| Thereafter                                                    | —                       | 1,661                            |
| Total licensing and purchase commitments at December 31, 2015 | <u>\$ 99,212</u>        | <u>\$ 7,794</u>                  |

#### *Contingent Consideration Commitments*

Pursuant to the purchase agreements for certain acquisitions, as discussed more fully in Note 5, we could be required to make additional contingent cash payments totaling up to \$27.6 million based on the achievement of certain revenue and operating results milestones as follows: \$15.5 million in 2017, \$5.1 million in 2019, and \$7.0 million, payable in any 12-month period from now until 2029 based on the accomplishment of certain revenue targets. Of the \$27.6 million total contingent obligation, we have assessed the fair value at December 31, 2016, to be \$8.8 million, of which \$5.8 million is included in other non-current liabilities and \$3.0 million is included in other current liabilities in the accompanying consolidated balance sheet.

#### *Employment Agreements*

Certain of our employment contracts contain provisions which guarantee the payments of certain amounts in the event of a change in control, as defined in the agreements, or if the executive is terminated for reasons other than cause, as defined in the agreements. At December 31, 2016, the commitment under these agreements totaled \$15.2 million (2015: \$15.3 million). The employment agreements with the Managing Directors and the German affiliate include a clause, whereby the affiliate will compensate the Managing Directors for potential deductions under Dutch law which, since 2014, has introduced a duty to deduct from a Managing Director's remuneration any increase in the value of shares or options that were part of his pay to the extent that such increase is based on a public offer, merger or other identity changing transaction.

#### *Contingencies*

In the ordinary course of business, we provide a warranty to customers that our products are free of defects and will conform to published specifications. Generally, the applicable product warranty period is one year from the date of delivery of the product to the customer or of site acceptance, if required. Additionally, we typically provide limited warranties with respect to our services. From time to time, we also make other warranties to customers, including warranties that our products are manufactured in accordance with applicable laws and not in violation of third-party rights. We provide for estimated warranty costs at the time of the product sale. We believe our warranty reserves as of December 31, 2016 and 2015 appropriately reflect the estimated cost of such warranty obligations.

#### *Preacquisition Contingencies*

In connection with certain acquisitions, amounts were paid into escrow accounts to cover preacquisition contingencies assumed in the acquisition. The escrow amounts expected to be claimed by QIAGEN are recorded as an asset in other non-current assets and amount to \$2.5 million as of December 31, 2016 (\$2.5 million as of December 31, 2015 recorded in other current assets).

#### *Litigation*

From time to time, we may be party to legal proceedings incidental to our business. As of December 31, 2016, certain claims, suits or legal proceedings arising out of the normal course of business have been filed or were pending against QIAGEN or its

subsidiaries. These matters have arisen in the ordinary course and conduct of business, as well as through acquisition. Although it is not possible to predict the outcome of such litigation, we assess the degree of probability and evaluate the reasonably possible losses that we could incur as a result of these matters. We accrue for any estimated loss when it is probable that a liability has been incurred and that the amount of the probable loss can be estimated. Based on the facts known to QIAGEN and after consultation with legal counsel, management believes that such litigation will not have a material adverse effect on QIAGEN's financial position or results of operations.

On September 9, 2016, the U.S. District Court for the Northern District of California, San Francisco Division, issued a decision in which the court granted a motion for a preliminary injunction against us as part of patent litigation filed by a competitor. The lawsuit alleges infringement of U.S. Patent 7,566,537 by our GeneReader NGS System. The latest decision comes as part of a long-standing intellectual property dispute with a competitor and complex litigation among several entities. These types of disagreements are common in the pharmaceutical and diagnostic industries, where new product launches can trigger legal actions by other parties to defend their positions. No meaningful revenue contributions from the GeneReader NGS System were included in our internal financial forecasts for 2016 due to the early launch stage of the system and because commercialization only began in December 2015. As a result of this court decision, which only applies to the U.S., and also in light of the forthcoming upgrade to the component under dispute that is not expected to be impacted by this decision, we neither expect a material financial impact from this decision on our financial outlook for full-year 2017 nor do we currently anticipate any material changes to our internal financial projections for 2017. A trial for this case is currently scheduled to begin in November 2017.

## 20. Share-Based Payments

We adopted the QIAGEN N.V. Amended and Restated 2005 Stock Plan (the 2005 Plan) in 2005 and the QIAGEN N.V. 2014 Stock Plan (the 2014 Plan) in 2014. The 2005 Plan expired by its terms in April 2015 and no further awards will be granted under the 2005 Plan. The plans allow for the granting of stock rights and incentive stock options, as well as non-qualified options, stock grants and stock-based awards, generally with terms of up to 10 years, subject to earlier termination in certain situations. Generally, options vest over a three-year period. The vesting and exercisability of certain stock rights will be accelerated in the event of a Change of Control, as defined in the plans. To date, all option grants have been at the market value on the grant date or at a premium above the closing market price on the grant date. We issue Treasury Shares to satisfy option exercises and had approximately 17.9 million Common Shares reserved and available for issuance under the 2005 and 2014 Plans at December 31, 2016.

### *Stock Options*

No stock options were granted in 2016 or 2015. A summary of the status of employee stock options as of December 31, 2016 and 2015, and changes during the years then ended is presented below:

|                                                         | <b>Stock Options<br/>(in thousands)</b> | <b>Weighted<br/>Average Exercise<br/>Price US\$</b> |
|---------------------------------------------------------|-----------------------------------------|-----------------------------------------------------|
| Outstanding at January 1, 2016                          | <b>1,821</b>                            | <b>\$ 19.37</b>                                     |
| Exercised                                               | <b>(354)</b>                            | <b>\$ 17.66</b>                                     |
| Forfeited                                               | <b>(3)</b>                              | <b>\$ 18.68</b>                                     |
| Expired                                                 | <b>(25)</b>                             | <b>\$ 16.21</b>                                     |
| Outstanding at December 31, 2016                        | <b>1,439</b>                            | <b>\$ 19.84</b>                                     |
| Vested at December 31, 2016                             | <b>1,439</b>                            | <b>\$ 19.84</b>                                     |
| <b>Vested and expected to vest at December 31, 2016</b> | <b>1,439</b>                            | <b>\$ 19.84</b>                                     |
| Outstanding at January 1, 2015                          | 2,531                                   | \$ 18.23                                            |
| Exercised                                               | (669)                                   | \$ 15.30                                            |
| Forfeited                                               | (22)                                    | \$ 17.01                                            |
| Expired                                                 | (19)                                    | \$ 12.80                                            |
| Outstanding at December 31, 2015                        | 1,821                                   | \$ 19.37                                            |
| Vested at December 31, 2015                             | 1,670                                   | \$ 19.27                                            |
| <b>Vested and expected to vest at December 31, 2015</b> | <b>1,817</b>                            | <b>\$ 19.37</b>                                     |

Generally, stock option grants are valued as a single award with a single average expected term and are amortized over the vesting period. The total intrinsic value of options exercised during the years ended December 31, 2016 and 2015 was \$3.2 million and \$7.0 million, respectively. At December 31, 2016, there was no unrecognized share-based compensation expense related to employee stock option awards.

At December 31, 2016, options outstanding had exercise prices ranging between \$14.26 and \$23.16 per share and expire in various years through 2023.

#### *Stock Units*

Stock units represent rights to receive Common Shares at a future date and include restricted stock units which are subject to time-vesting only and performance stock units which include performance conditions in addition to time-vesting. There is no exercise price and the fair market value at the time of the grant is recognized over the requisite vesting period, generally 3 to 5 years, and in certain grants 10 years. The fair market value is determined based on the number of restricted stock units granted and the market value of our shares on the grant date. Pre-vesting forfeitures were estimated to be approximately 6.5% (2015: 7.2%). At December 31, 2016, there was \$76.5 million remaining in unrecognized compensation cost including estimated forfeitures related to these awards, which is expected to be recognized over a weighted average period of 2.45 years (2015: \$55.1 million over a weighted average of 2.5 years). The weighted average grant date fair value of restricted stock units granted during the year ended December 31, 2016 was \$23.81 (2015: \$24.91). The total fair value of restricted stock units released during the years ended December 31, 2016 and 2015 was \$27.4 million and \$28.7 million, respectively.

A summary of stock units as of December 31, 2016 and 2015, and changes during the year then ended are presented below:

| <b>(in thousands)</b>                        | <b>2016</b>    | <b>2015</b> |
|----------------------------------------------|----------------|-------------|
| Outstanding at January, 1 <sup>st</sup>      | <b>8,956</b>   | 9,160       |
| Granted                                      | <b>2,942</b>   | 1,691       |
| Released                                     | <b>(1,200)</b> | (1,153)     |
| Forfeited                                    | <b>(500)</b>   | (742)       |
| Outstanding at December 31st                 | <b>10,198</b>  | 8,956       |
| Vested and expected to vest at December 31st | <b>8,886</b>   | 7,298       |

#### *Compensation Expense*

Share-based compensation expense for the years ended December 31, 2016 and 2015 totaled approximately \$28.3 million and \$24.0 million, respectively as shown in the table below. No share-based compensation cost was capitalized in inventory in 2016 and 2015 as the amounts were not material. Following the restructuring program discussed in Note 6, share-based compensation expense in 2016 includes the impact of \$2.0 million in forfeitures in connection with the restructuring terminations. Total share-based compensation expense in 2015 was lower compared to 2016 in part due to a reassessment on stock units with performance criteria.

| <b>(in thousands)</b>                         | <b>2016</b>      | <b>2015</b> |
|-----------------------------------------------|------------------|-------------|
| Cost of sales                                 | <b>\$ 2,553</b>  | \$ 2,177    |
| Research and development                      | <b>4,735</b>     | 5,679       |
| Sales and marketing                           | <b>4,824</b>     | 5,034       |
| General and administrative                    | <b>16,176</b>    | 11,083      |
| Share-based compensation expense before taxes | <b>28,288</b>    | 23,973      |
| Income tax benefit                            | <b>(1,488)</b>   | 52          |
| Net share-based compensation expense          | <b>\$ 29,776</b> | \$ 23,921   |

## **21. Employee Benefits and Personnel Costs**

We maintain various benefit plans, including defined contribution and defined benefit plans. Our U.S. defined contribution plan is qualified under Section 401(k) of the Internal Revenue Code, and covers substantially all U.S. employees. Participants may contribute a portion of their compensation not exceeding a limit set annually by the Internal Revenue Service. This plan includes a provision for us to match a portion of employee contributions. Total expense under the 401(k) plans, including the plans acquired via business acquisitions, was \$2.5 million and \$2.4 million for the years ended December 31, 2016 and 2015, respectively. We also have defined contributions up to an established maximum. We make matching contributions up to an established maximum. Matching contributions made to the plan, and expensed, totaled approximately \$0.3 million in each year ended December 31, 2016 and 2015.

We have four defined benefit, non-contributory retirement or termination plans that cover certain employees in Germany, France, Japan and Italy. These defined benefit plans provide benefits to covered individuals satisfying certain age and service requirements. For certain plans, we calculate the vested benefits to which employees are entitled if they separate immediately. The benefits accrued on a pro-rata basis during the employees' employment period are based on the individuals' salaries, adjusted for inflation.

The liability under the defined benefit plans was \$6.7 million at December 31, 2016 and \$6.6 million at December 31, 2015, and is included as a component of other non-current liabilities on the accompanying consolidated balance sheets.

## Personnel Costs

Personnel costs amounted to \$464.4 million in 2016 (2015: \$416.1 million). As of December 31, 2016, there were 4,684 employees within the Group (2015: 4,559).

| (in thousands)              | 2016              | 2015              |
|-----------------------------|-------------------|-------------------|
| Salaries and wages          | \$ 266,703        | \$ 262,668        |
| Social security             | 89,109            | 47,556            |
| Share-based payment expense | 28,288            | 23,973            |
| Termination costs           | 19,220            | —                 |
| Other                       | 61,036            | 81,947            |
| Personnel Costs             | <u>\$ 464,356</u> | <u>\$ 416,144</u> |

The personnel costs are allocated to the functional areas in which the respective employees are working or in the case of the incremental termination benefits which are the result of restructuring activities as discussed in Note 6 are recorded in cost of sales and general and administrative, restructuring, integration and other costs.

## 22. Related Party Transactions

From time to time, we have transactions with other companies in which we hold an interest all of which are individually and in the aggregate immaterial, as summarized in the table below:

| (in thousands)                                        | For the years ended<br>December 31, |          |
|-------------------------------------------------------|-------------------------------------|----------|
|                                                       | 2016                                | 2015     |
| Net sales                                             | \$ 1,360                            | \$ 418   |
| Reimbursements against research and development costs | \$ —                                | \$ 2,032 |

| (in thousands)                       | As of December 31, |          |
|--------------------------------------|--------------------|----------|
|                                      | 2016               | 2015     |
| Accounts receivable                  | \$ 1,302           | \$ 1,209 |
| Loans receivable, including interest | \$ 13,067          | \$ 7,472 |
| Accounts payable                     | \$ 391             | \$ 471   |
| Other current liabilities            | \$ 3,926           | \$ —     |
| Other non-current liabilities        | \$ 5,889           | \$ —     |

During 2015, we entered in a loan agreement for \$5.0 million bearing interest of 6% and due in January 2020 with a company in which we hold an ownership interest. In the 2016, we increased this loan by \$5.0 million resulting in a loan balance at December 31, 2016 of \$10.7 million including accrued interest. Additionally in 2015, we entered into €2.0 million (\$2.4 million as of December 31, 2016 including accrued interest), loan agreement, bearing interest of 7% and due in June 2019, with another company in which we hold an ownership interest. The loans were made for general business purposes and no amounts have been repaid. These loans are included in other long-term assets in the accompanying consolidated balance sheet as of December 31, 2016. Additionally during 2016, we entered into a short-term loan arrangement with another company in which we hold an ownership interest. In August 2016, we converted a \$0.6 million short-term loan into additional interest of the company which we account for on a cost-method as discussed in Note 7.

As discussed in Note 11, during 2016 we acquired a 19.0% interest in Hombrechtikon Systems Engineering AG (HSE) for a total obligation of \$9.8 million, which is payable over three years. As of December 31, 2016, \$3.9 million was included in other current liabilities and \$5.9 million was included in other non-current liabilities in the accompanying consolidated balance sheet. HSE is accounted for under the equity method of accounting as discussed in Note 11.

## Compensation of Directors and Officers

Total compensation for members of the Managing Board and Supervisory for the period ended December 31, 2016, amounts to \$16.0 million (2015: \$11.8 million) as shown in the table below. Total non-periodical remuneration according to Netherlands Civil Code included in total compensation for the period ended December 31, 2016 was \$3.2 million (2015: \$2.4 million).

#### *Remuneration of the Managing Board*

The tables below state the amounts earned on an accrual basis by our Managing Board members in 2016 and 2015.

For the year ended December 31, 2016

(in thousands, except for number of award grants)

|                                                                         | Peer M. Schatz  | Roland Sackers  |
|-------------------------------------------------------------------------|-----------------|-----------------|
| Fixed Salary                                                            | \$ 1,146        | \$ 514          |
| Other <sup>(5)</sup>                                                    | 12              | 37              |
| <b>Total fixed income 2016</b>                                          | <b>\$ 1,158</b> | <b>\$ 551</b>   |
| Short-term variable cash bonus <sup>(1)</sup>                           | 165             | 53              |
| <b>Total short-term income 2016</b>                                     | <b>\$ 1,323</b> | <b>\$ 604</b>   |
| Defined contribution on benefit plan                                    | \$ 72           | \$ 74           |
| <i>Number of restricted stock units granted 2016<sup>(4)</sup></i>      | <i>21,081</i>   | <i>7,153</i>    |
| Related recognized compensation expense                                 | \$ 286          | \$ 97           |
| <i>Number of performance stock units granted 2016 <sup>(2, 3)</sup></i> | <i>791,869</i>  | <i>229,383</i>  |
| Related recognized compensation expense                                 | \$ 1,809        | \$ 421          |
| <b>Total compensation</b>                                               | <b>\$ 3,490</b> | <b>\$ 1,196</b> |

- (1) The Variable Cash Bonus amount does not include values which were converted to equity-based compensation.
- (2) The Performance Stock Units Granted amount includes the number of Performance Stock Units granted to each Managing Board member at his election in lieu of the value of the cash bonus earned by such Managing Board member in 2016. These performance stock units vest over two years from the grant date. In 2016, Mr. Schatz received a grant of 27,677 performance stock units and Mr. Sackers received a grant of 8,884 performance stock units. These 2016 performance grants were achieved at 90% of the targeted vesting amount.
- (3) The Performance Stock Units Granted amount includes the number of Performance Stock Units granted to each Managing Board member under the Company's Commitment Program. In 2016, Mr. Schatz received a grant of 460,220 performance stock units and Mr. Sackers received a grant of 144,809 performance stock units.
- (4) In lieu of cash bonus, each Managing Board member elected to receive the value earned in 2015 in restricted stock units which vest over two years from the grant date. In 2016, Mr. Schatz received a grant of 21,081 restricted stock units and Mr. Sackers received a grant of 7,153 restricted stock units.
- (5) Amounts include, among others, car lease and reimbursed personal expenses such as tax consulting. We also occasionally reimburse our Managing Directors' personal expenses related to attending out-of-town meetings but not directly related to their attendance. Amounts do not include the reimbursement of certain expenses relating to travel incurred at the request of QIAGEN, other reimbursements or payments that in total did not exceed \$10,000 or tax amounts paid by the Company to tax authorities in order to avoid double-taxation under multi-tax jurisdiction employment agreements.

For the year ended December 31, 2015

(in thousands, except for number of option and award grants)

|                                                       | Peer M. Schatz  | Roland Sackers  |
|-------------------------------------------------------|-----------------|-----------------|
| Fixed Salary                                          | \$ 1,149        | \$ 500          |
| Other <sup>(2)</sup>                                  | 10              | 50              |
| <b>Total fixed income 2015</b>                        | <b>\$ 1,159</b> | <b>\$ 550</b>   |
| Short-term variable cash bonus <sup>(1)</sup>         | 90              | 49              |
| <b>Total short-term income 2015</b>                   | <b>1,249</b>    | <b>599</b>      |
| Defined contribution on benefit plan                  | \$ 72           | \$ 74           |
| <i>Number of performance stock units granted 2015</i> | <i>378,811</i>  | <i>105,654</i>  |
| Related recognized compensation expense               | \$ 1,458        | \$ 407          |
| <b>Total compensation</b>                             | <b>\$ 2,779</b> | <b>\$ 1,080</b> |

- (1) Amount does not include cash bonus amounts which were converted to equity-based compensation. In lieu of cash bonus, each Managing Board member elected to receive the value earned in 2015 in restricted stock units to be granted in 2016 which will vest over two years from the grant date. Mr. Schatz will receive a grant of 21,081 restricted stock units and Mr. Sackers will receive a grant of 7,153 restricted stock units.

- (2) Amounts include, among others, reimbursed personal expenses such as tax consulting. We also occasionally reimburse our Managing Directors' personal expenses related to attending out-of-town meetings but not directly related to their attendance. Amounts do not include the reimbursement of certain expenses relating to travel incurred at the request of QIAGEN, other reimbursements or payments that in total did not exceed \$10,000 or tax amounts paid by the Company to tax authorities in order to avoid double-taxation under multi-tax jurisdiction employment agreements.

### *Remuneration of the Supervisory Board*

The following table summarizes the total compensation paid to the members of the Supervisory Board in 2016<sup>(1)</sup> and 2015<sup>(2)</sup>:

| <b>For the year ended<br/>December 31, 2016 (in<br/>thousands, except for<br/>number of share grants)</b> | <b>Fixed<br/>remuneration</b> | <b>Chairman /<br/>vice<br/>chairman<br/>committee</b> | <b>Committee<br/>membership</b> | <b>Total<sup>(3)</sup></b> | <b>Number of<br/>restricted<br/>stock units<br/>granted</b> | <b>Related<br/>recognized<br/>compensation<br/>expense</b> |
|-----------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------|---------------------------------|----------------------------|-------------------------------------------------------------|------------------------------------------------------------|
| Stéphane Bancel                                                                                           | \$ 57.5                       | —                                                     | 32.0                            | \$ 89.5                    | 10,742                                                      | \$ 29.4                                                    |
| Dr. Werner Brandt                                                                                         | \$ 75.0                       | 6.0                                                   | —                               | \$ 81.0                    | 10,742                                                      | \$ 14.4                                                    |
| Dr. Metin Colpan                                                                                          | \$ 57.5                       | 12.0                                                  | 6.0                             | \$ 75.5                    | 10,742                                                      | \$ 29.4                                                    |
| Prof. Dr. Manfred Karobath                                                                                | \$ 120.0                      | 15.0                                                  | 14.5                            | \$ 149.5                   | 10,742                                                      | \$ 102.3                                                   |
| Prof. Dr. Ross L. Levine                                                                                  | \$ 28.8                       | —                                                     | 3.0                             | \$ 31.8                    | —                                                           | \$ —                                                       |
| Prof. Dr. Elaine Mardis                                                                                   | \$ 57.5                       | —                                                     | 6.0                             | \$ 63.5                    | 10,742                                                      | \$ 29.4                                                    |
| Lawrence A. Rosen                                                                                         | \$ 57.5                       | 25.0                                                  | —                               | \$ 82.5                    | 10,742                                                      | \$ 29.4                                                    |
| Elizabeth E. Tallett                                                                                      | \$ 57.5                       | 9.0                                                   | 23.5                            | \$ 90.0                    | 10,742                                                      | \$ 102.3                                                   |

(1) Dr. Werner Brandt was a member of the Supervisory Board since 2007 and did not stand for re-election at the Company's Annual General Meeting in June 2016.

(3) Supervisory Directors are reimbursed for travel costs and for any value-added tax to be paid on their remuneration. These reimbursements are excluded from the amounts presented herein.

| <b>For the year ended<br/>December 31, 2015 (in<br/>thousands, except for<br/>number of share grants)</b> | <b>Fixed<br/>remuneration</b> | <b>Chairman /<br/>vice<br/>chairman<br/>committee</b> | <b>Committee<br/>membership</b> | <b>Total<sup>(3)</sup></b> | <b>Number of<br/>restricted<br/>stock units<br/>granted</b> | <b>Related<br/>recognized<br/>compensation<br/>expense<sup>(1)</sup></b> |
|-----------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------|---------------------------------|----------------------------|-------------------------------------------------------------|--------------------------------------------------------------------------|
| Stéphane Bancel                                                                                           | \$ 57.5                       | —                                                     | 32.0                            | \$ 89.5                    | 11,241                                                      | \$ 32.1                                                                  |
| Dr. Werner Brandt                                                                                         | \$ 150.0                      | 12.0                                                  | —                               | \$ 162.0                   | 11,241                                                      | \$ 32.1                                                                  |
| Dr. Metin Colpan                                                                                          | \$ 57.5                       | 12.0                                                  | 3.0                             | \$ 72.5                    | 11,241                                                      | \$ 32.1                                                                  |
| Prof. Dr. Manfred Karobath                                                                                | \$ 90.0                       | 18.0                                                  | 12.0                            | \$ 120.0                   | 11,241                                                      | \$ 125.5                                                                 |
| Prof. Dr. Elaine Mardis                                                                                   | \$ 57.5                       | —                                                     | 6.0                             | \$ 63.5                    | 11,241                                                      | \$ 32.1                                                                  |
| Lawrence A. Rosen                                                                                         | \$ 57.5                       | 25.0                                                  | —                               | \$ 82.5                    | 11,241                                                      | \$ 32.1                                                                  |
| Elizabeth E. Tallett                                                                                      | \$ 57.5                       | —                                                     | 26.0                            | \$ 83.5                    | 11,241                                                      | \$ 125.5                                                                 |
| Dr. James E. Bradner                                                                                      | \$ 52.7                       | —                                                     | 5.5                             | \$ 58.2                    | —                                                           | \$ —                                                                     |

(2) Prof. James E. Bradner, M.D. was elected at the Company's Annual General Meeting in June 2015 and Dr. Bradner declared his resignation from the Supervisory Board as of December 31, 2015.

(3) Supervisory Directors are reimbursed for travel costs and for any value-added tax to be paid on their remuneration. These reimbursements are excluded from the amounts presented herein.

### **Supervisory Board and Managing Board members' interests in QIAGEN N.V. shares**

#### *Share Ownership*

The following table sets forth certain information as of January 31, 2016 concerning the ownership of Common Shares by our directors and officers. In preparing the following table, we have relied on information furnished by such persons.

| <b><u>Name and Country of Residence</u></b> | <b><u>Shares<br/>Beneficially<br/>Owned</u></b> | <b><u>Percent<br/>Ownership</u></b> |
|---------------------------------------------|-------------------------------------------------|-------------------------------------|
| Peer M. Schatz, Germany                     | 2,046,821.92                                    | 0.91%                               |
| Roland Sackers, Germany                     | 19,258.00                                       | *                                   |
| Stéphane Bancel, United States              | —                                               | —                                   |
| Dr. Metin Colpan, Germany                   | 3,523,427.00                                    | 1.56%                               |
| Prof. Dr. Manfred Karobath, Austria         | 17,896.00                                       | *                                   |
| Prof. Dr. Ross L. Levine, United States     | —                                               | —                                   |
| Prof. Dr. Elaine Mardis, United States      | —                                               | —                                   |
| Lawrence A. Rosen, Germany                  | —                                               | —                                   |
| Elizabeth Tallett, United States            | 4,854.00                                        | *                                   |

\* Indicates that the person beneficially owns less than 0.5% of the Common Shares issued and outstanding as of January 31, 2017.

### 23. Fair Value Measurements

Financial Instruments are measured at fair value according the following hierarchy which prioritizes the inputs used in measuring fair value as follows:

- *Level 1*, Observable inputs, such as quoted prices in active markets;
- *Level 2*, Inputs, other than the quoted price in active markets, that are observable either directly or indirectly; and
- *Level 3*, Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

Our assets and liabilities measured at fair value on a recurring basis consist of available-for-sale financial assets, which are classified in Level 1 and Level 2 of the fair value hierarchy, undesignated derivative contracts used to hedge currency and interest rate risk and derivative financial instruments entered into in connection with the Cash Convertible Notes discussed in Note 24, which are classified in Level 2 of the fair value hierarchy, and contingent consideration accruals which are classified in Level 3 of the fair value hierarchy, and are shown in the tables below.

In determining fair value for Level 2 instruments, we apply a market approach, using quoted active market prices relevant to the particular instrument under valuation, giving consideration to the credit risk of both the respective counterparty to the contract and the Company. To determine our credit risk we estimated our credit rating by benchmarking the price of outstanding debt to publicly-available comparable data from rated companies. Using the estimated rating, our credit risk was quantified by reference to publicly-traded debt with a corresponding rating. The Level 2 derivative financial instruments include the Call Options asset, the Warrants liability and the embedded conversion option liability. See Note 15 and Note 24 for further information. The derivatives are not actively traded and are valued based on an option pricing model that uses observable market data for inputs. Significant market data inputs used to determine fair values as of December 31, 2016 included our common stock price, the risk-free interest rate, and the implied volatility of our common stock. The Call Options asset and the embedded cash conversion option liability were designed with the intent that changes in their fair values would substantially offset, with limited net impact to our earnings. Therefore, the sensitivity of changes in the unobservable inputs to the option pricing model for such instruments is substantially mitigated.

Our Level 3 instruments include contingent consideration liabilities. We value contingent consideration liabilities using unobservable inputs, applying the income approach, such as the discounted cash flow technique, or the probability-weighted scenario method. Contingent consideration arrangements obligate us to pay the sellers of an acquired entity if specified future events occur or conditions are met such as the achievement of technological or revenue milestones. We use various key assumptions, such as the probability of achievement of the milestones (0% to 100%) and the discount rate (between 2.2% and 7.7%), to represent the non-performing risk factors and time value when applying the income approach. We regularly review the fair value of the contingent consideration, and reflect any change in the accrual in the consolidated statements of income in the line items commensurate with the underlying nature of milestone arrangements. The maximum amount of contingent consideration relating to business combinations is disclosed in Note 19.

As of December 31, 2016, we held the following financial instruments carried at fair value on the statement of financial position:

| (in thousands)                                   | 2016                | Level 1         | Level 2             | Level 3           |
|--------------------------------------------------|---------------------|-----------------|---------------------|-------------------|
| Available-for-sale financial assets, current     | \$ 92,999           | \$ 3,699        | \$ 89,300           | \$ —              |
| Available-for-sale financial assets, non-current | 4,064               | 4,064           | —                   | —                 |
| Call option                                      | 185,750             | —               | 185,750             | —                 |
| Foreign exchange contracts                       | 3,154               | —               | 3,154               | —                 |
| Interest rate contracts                          | 6,655               | —               | 6,655               | —                 |
| <b>Assets</b>                                    | <b>\$ 292,622</b>   | <b>\$ 7,763</b> | <b>\$ 284,859</b>   | <b>\$ —</b>       |
| Foreign exchange contracts                       | (6,089)             | —               | (6,089)             | —                 |
| Cash conversion option                           | (187,546)           | —               | (187,546)           | —                 |
| Warrants                                         | (154,347)           | —               | (154,347)           | —                 |
| Contingent consideration                         | (8,754)             | —               | —                   | (8,754)           |
| <b>Liabilities</b>                               | <b>\$ (356,736)</b> | <b>\$ —</b>     | <b>\$ (347,982)</b> | <b>\$ (8,754)</b> |

As of December 31, 2015, we held the following financial instruments carried at fair value on the statement of financial position:

| (in thousands)                                   | 2015                | Level 1         | Level 2             | Level 3            |
|--------------------------------------------------|---------------------|-----------------|---------------------|--------------------|
| Available-for sale financial assets, current     | \$ 130,817          | \$ 3,674        | \$ 127,143          | \$ —               |
| Available-for-sale financial assets, non-current | 3,485               | 3,485           | —                   | —                  |
| Call option                                      | 169,037             | —               | 169,037             | —                  |
| Foreign exchange contracts                       | 1,393               | —               | 1,393               | —                  |
| Interest rate contracts                          | 12,687              | —               | 12,687              | —                  |
| <b>Assets</b>                                    | <b>\$ 317,419</b>   | <b>\$ 7,159</b> | <b>\$ 310,260</b>   | <b>\$ —</b>        |
| Foreign exchange contracts                       | (525)               | —               | (525)               | —                  |
| Cash conversion option                           | (170,951)           | —               | (170,951)           | —                  |
| Warrants                                         | (137,457)           | —               | (137,457)           | —                  |
| Contingent consideration                         | (17,678)            | —               | —                   | (17,678)           |
| <b>Liabilities</b>                               | <b>\$ (326,611)</b> | <b>\$ —</b>     | <b>\$ (308,933)</b> | <b>\$ (17,678)</b> |

For liabilities with Level 3 inputs, the following table summarizes the activity as of December 31, 2016 and 2015:

| Fair Value Measurements Using Significant Unobservable Inputs (Level 3) Contingent Consideration (in thousands) |    | 2016     | 2015     |
|-----------------------------------------------------------------------------------------------------------------|----|----------|----------|
| Contingent consideration as at January 1 <sup>st</sup>                                                          | \$ | (17,678) | (17,477) |
| Additions from acquisitions                                                                                     |    | (692)    | (5,476)  |
| Payments                                                                                                        |    | 3,120    | —        |
| Gain included in earnings                                                                                       |    | 6,501    | 5,225    |
| Foreign currency translation                                                                                    |    | (5)      | 50       |
| Contingent consideration as at December 31 <sup>st</sup>                                                        | \$ | (8,754)  | (17,678) |

For the year ended December 31, 2016, of the total \$8.8 million accrued for contingent consideration, \$5.8 million is included in other non-current liabilities and \$3.0 million is included in other current liabilities. During 2016, a \$6.5 million gain for the reduction in the fair value of contingent consideration related to unmet milestones was recognized in general and administrative, integration and other in the accompanying consolidated statements of income. During 2015, gains for the reduction in the fair value of contingent consideration totaling, \$5.2 million were recognized in general and administrative, integration and other.

## 24. Financial Risk Factors and Use of Derivative Financial Instruments

### 24.1. Financial Risks

#### Market risk

Our market risk relates primarily to interest rate exposures on cash, short-term investments and borrowings and foreign currency exposures. Financial risk is centrally managed and is regulated by internal guidelines which require a continuous internal risk analysis. The overall objective of our risk management is to reduce the potential negative earnings effects from

changes in interest and foreign exchange rates. Exposures are managed through operational methods and financial instruments relating to interest rate and foreign exchange risks. In the ordinary course of business, we use derivative instruments, including swaps, forwards and/or options, to manage potential losses from foreign currency exposures and interest rates. The principal objective of such derivative instruments is to minimize the risks and/or costs associated with global financial and operating activities. We do not utilize derivative or other financial instruments for trading or other speculative purposes. All derivatives are recognized as either assets or liabilities in the balance sheet and are measured at fair value with any change in fair value recognized in earnings in the period of change, unless the derivative qualifies as an effective hedge that offsets certain exposures. In determining fair value, we consider both the counterparty credit risk and our own creditworthiness, to the extent that the derivatives are not covered by collateral agreements with respective counterparties.

#### *Foreign currency exchange rates*

As a global enterprise, we are subject to risks associated with fluctuations in foreign currencies with regard to our ordinary operations. This includes foreign currency-denominated receivables, payables, debt, and other balance sheet positions as well as future cash flows resulting from anticipated transactions including intra-group transactions.

A significant portion of our revenues and expenses are earned and incurred in currencies other than the U.S. dollar. The euro is the most significant such currency, with others including the British pound, Japanese yen, Chinese renminbi, Swiss franc, and Canadian and Australian dollars. Fluctuations in the value of the currencies in which we conduct our business relative to the U.S. dollar have caused and will continue to cause U.S. dollar translations of such currencies to vary from one period to another. Due to the number of currencies involved, the constantly changing currency exposures, and the potential substantial volatility of currency exchange rates, we cannot predict the effect of exchange rate fluctuations upon future operating results. In general terms, depreciation of the U.S. dollar against our other foreign currencies will increase reported net sales. However, this effect is, at least partially, offset by the fact that we also incur substantial expenses in foreign currencies.

We have significant production and manufacturing facilities located in Germany and intercompany sales of inventory also expose us to foreign currency exchange rate risk. Intercompany sales of inventory are generally denominated in the local currency of the subsidiary purchasing the inventory in order to centralize foreign currency risk with the manufacturing subsidiary. We use an in-house bank approach to net and settle intercompany payables and receivables as well as intercompany foreign exchanged swaps and forward contracts in order to centralize the foreign exchange rate risk to the extent possible. We have entered in the past and may enter in the future into foreign exchange derivatives including forwards, swaps and options to manage the remaining foreign exchange exposure.

For the presentation of market risks, IFRS 7 requires sensitivity analyses that show the effects of hypothetical changes of relevant risk variables on profit or loss and shareholders' equity. Currency risks as defined by IFRS 7 arise on account of financial instruments being denominated in a currency that is not the functional currency and being of a monetary nature; differences resulting from the translation of financial statements into the Company's presentation currency are not taken into consideration. Relevant risk variables are generally all non-functional currencies in which QIAGEN has financial instruments.

QIAGEN is exposed to currency risks from financial derivatives. If each of the respective currency pairs for which the Company has financial derivatives in place, which do not qualify for hedge accounting in accordance with IAS 39, varied from the rates used for the preparation of the consolidated financial statements, this would have had an effect on the net income of the Company. If, at December 31, 2016, the U.S. dollar had gained or lost 10 % against all identified major currencies, the estimated effect would have been approximately \$5.8 million gain or \$5.2 million loss, respectively (2015: \$3.2 million gain or \$3.8 million loss). Any effect would have been almost fully off-set by corresponding valuation adjustments in the positions, which economically had been hedged by these financial derivatives. Accordingly, the net effect of such variance in currency rates would not have been material.

#### *Interest rates*

The Company is exposed to interest rate risk by floating rate financial debt and floating rate financial assets. This exposure is managed by varying the proportion of fixed and floating rate debt, while all non-derivative financial assets pay interest on floating rates. Net financial income earned on the Company's net financial assets is generally affected by changes in the level of interest rates, principally the Euro and the U.S. dollar interest rate.

At December 31, 2016, we had \$439.2 million in cash and cash equivalents (2015: \$290.0 million). Interest income earned on our cash investments is affected by changes in the relative levels of market interest rates. We only invest in high-grade investment instruments. A hypothetical adverse 10% movement in market interest rates would not have materially impact our financial statements.

Borrowings against lines of credit are at variable interest rates. We had no amounts outstanding against our lines of credit at December 31, 2016 and 2015. A hypothetical adverse 10% movement in market interest rates would not have materially impacted our financial statements.

At December 31, 2016, we had \$1.1 billion in current and non-current financial debt (2015: \$1.0 billion). A hypothetical adverse 10% movement in market interest rates would not have materially impacted our financial statements.

#### *Liquidity risk*

To date, we have funded our business primarily through internally generated funds, debt and the private and public sales of equity. Our primary use of cash has been to support continuing operations and our investing activities including capital expenditure requirements and acquisitions. As of December 31, 2016 and 2015, we had cash and cash equivalents of \$439.2 million and \$290.0 million, respectively. We also had current available-for-sale financial assets of \$93.0 million and \$130.8 million, respectively. Cash and cash equivalents are primarily held in Euros and U.S. dollars, other than those cash balances maintained in the local currency of subsidiaries to meet local working capital needs. As of December 31, 2016 and 2015, we had working capital of \$707.6 million and \$648.2 million, respectively.

In October 2016, we extended the maturity of our €400.0 million syndicated revolving credit facility, which now has a contractual lifetime until December 2021 of which no amounts were utilized at December 31, 2016. We have additional credit lines totaling €36.6 million with no expiration date, none of which were utilized as of December 31, 2016. We also have finance lease obligations, including interest, in the amount of \$2.7 million (2015: \$4.0 million), and repayment obligations of \$1.1 billion of non-current financial debt (2015: \$1.0 billion), of which no amounts are current as of December 31, 2016.

As of December 31, 2016, our future contractual cash obligations are as follows:

| Contractual Obligations<br>(in thousands)   | Payments Due by Period |                   |                  |                   |                  |                   |                   |
|---------------------------------------------|------------------------|-------------------|------------------|-------------------|------------------|-------------------|-------------------|
|                                             | Total                  | 2017              | 2018             | 2019              | 2020             | 2021              | Thereafter        |
| Financial debt <sup>(1)</sup>               | \$ 1,158,556           | \$ 18,870         | \$ 18,870        | \$ 492,779        | \$ 14,928        | \$ 275,249        | \$ 337,860        |
| Purchase obligations                        | 95,276                 | 61,643            | 19,824           | 12,257            | 891              | 661               | —                 |
| Operating leases                            | 38,602                 | 13,338            | 9,292            | 6,121             | 3,752            | 3,409             | 2,690             |
| License and royalty payments <sup>(2)</sup> | 65,502                 | 15,969            | 11,562           | 10,702            | 10,438           | 8,066             | 8,765             |
| Finance lease obligations <sup>(3)</sup>    | 2,719                  | 1,114             | 1,534            | 59                | 12               | —                 | —                 |
| Total contractual cash obligations          | <u>\$ 1,360,655</u>    | <u>\$ 110,934</u> | <u>\$ 61,082</u> | <u>\$ 521,918</u> | <u>\$ 30,021</u> | <u>\$ 287,385</u> | <u>\$ 349,315</u> |

<sup>(1)</sup> Amounts include required principal, stated at current carrying values, and interest payments.

<sup>(2)</sup> As of December 31, 2016, \$14.8 million and \$40.3 million are included in other current liabilities and other non-current liabilities, respectively.

<sup>(3)</sup> Includes future cash payments, including interest, due under finance lease arrangements.

In addition to the above and pursuant to purchase agreements for several of our recent acquisitions, we could be required to make additional contingent cash payments totaling up to \$27.6 million based on the achievement of certain revenue and operating results milestones as follows: \$15.5 million in 2017, \$5.1 million in 2019 and \$7.0 million, payable in any 12-month period from now until 2029 based on the accomplishment of certain revenue targets, the launch of certain products or the grant of certain patent rights. As of December 31, 2016, we have accrued \$8.8 million for these contingent payments of which \$5.8 million is included in other non-current liabilities and \$3.0 million is included in other current liabilities.

We believe that funds from operations, existing cash and cash equivalents, together with the proceeds from our public and private sales of equity, and availability of financing facilities, will be sufficient to fund our planned operations and expansion during the coming year. However, any global economic downturn may have a greater impact on our business than currently expected, and we may experience a decrease in the sales of our products, which could impact our ability to generate cash. If our future cash flows from operations and other capital resources are not adequate to fund our liquidity needs, we may be required to obtain additional debt or equity financing or to reduce or delay our capital expenditures, acquisitions or research and development projects. If we could not obtain financing on a timely basis or at satisfactory terms, or implement timely reductions in our expenditures, our business could be adversely affected.

#### *Credit risk*

Financial instruments that potentially subject us to concentrations of credit risk are cash and cash equivalents, available-for-sale financial assets, and accounts receivable. We attempt to minimize the risks related to cash and cash equivalents and available-for-sale financial assets by dealing with highly-rated financial institutions and investing in a broad and diverse range of

financial instruments. We have established guidelines related to credit quality and maturities of investments intended to maintain safety and liquidity. Concentration of credit risk with respect to accounts receivable is limited due to a large and diverse customer base, which is dispersed over different geographic areas. Allowances are maintained for potential credit losses and such losses have historically been within expected ranges. There were no significant concentrations of credit risk during the reporting period. The maximum exposure to credit risk is represented by the carrying amount of each financial asset in the statement of financial position.

Credit risk is managed on a Company basis, except for credit risk relating to accounts receivable balances. Each local entity is responsible for managing and analyzing the credit risk for each of their new clients before standard payment and delivery terms and conditions are offered.

#### *Counterparty risk*

The financial instruments used in managing our foreign currency, equity and interest rate exposures have an element of risk in that the counterparties may be unable to meet the terms of the agreements. To the extent that derivatives are not subject to mutual collateralization agreements, we attempt to minimize this risk by limiting the counterparties to a diverse group of highly-rated international financial institutions. The carrying values of our financial instruments incorporate the non-performance risk by using market pricing for credit risk. However, we have no reason to believe that any counterparties will default on their obligations and therefore do not expect to record any losses as a result of counterparty default. In order to minimize our exposure with any single counterparty, we have entered into all derivative agreements, with the exception of the Call Spread Overlay, under master agreement which allow us to manage the exposure with the respective counterparty on a net basis. Most of these master agreements, include bilateral collateral agreements.

#### *Fair values*

The fair values of financial assets and financial liabilities are determined in accordance with the accounting policies stated under Notes 3.12 and 3.13, respectively.

#### *Equity prices*

The Warrants issued as part of the Call Spread Overlay discussed in Note 15 and Note 24.2 expose us to income statement volatility due to changes in our own equity price. Changes in the fair value of the Warrants are recognized in other financial expense, net. Assuming a hypothetical 10% increase or decrease in equity prices at December 31, 2016, the estimated effect would have been approximately \$43.2 million gain or \$38.6 million loss, respectively (2015: \$41.6 million gain or \$36.7 million loss).

#### *Commodities*

The Company has exposures to price risk related to anticipated purchases of certain commodities used as raw materials in its business. A change in commodity prices may alter the gross margin, but due to the limited exposure to any single raw material, a price change is unlikely to have a material unforeseen impact on the Company's earnings.

### **24.2. Use of Derivative Financial Instruments**

#### *Derivatives and Hedging*

In the ordinary course of business, we use derivative instruments, including swaps, forwards and/or options, to manage potential losses from foreign currency exposures and interest bearing assets or liabilities. The principal objective of such derivative instruments is to minimize the risks and/or costs associated with our global financial and operating activities. We do not utilize derivative or other financial instruments for trading or other speculative purposes. We recognize all derivatives as either assets or liabilities on the balance sheet on a gross basis, measure those instruments at fair value and recognize the change in fair value in earnings in the period of change, unless the derivative qualifies as an effective hedge that offsets certain exposures. In 2015, we have agreed with almost all of our counterparties with whom we enter into cross-currency swaps, interest rate swaps or foreign exchange contracts, to enter into bilateral collateralization contracts under which we receive or provide cash collateral, as the case may be, for the net position with each of these counterparties. As of December 31, 2016, cash collateral positions consisted of \$7.0 million recorded in other current liabilities and \$1.2 million recorded in other current assets in the accompanying consolidated balance sheet. As of December 31, 2015, we had a net liability position of \$7.8 million recorded in other current liabilities in the accompanying consolidated balance sheet.

As of December 31, 2016 and 2015, we held derivative instruments that are designated and qualify as cash flow hedges where the effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income (loss) and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings. In 2016 and in 2015, we did not record any hedge ineffectiveness related to any cash-flow hedges in earnings. Based on their valuation as of December 31, 2016, we expect approximately \$7.6 million of derivative

losses included in accumulated other comprehensive loss will be reclassified into income during the next 12 months. The cash flows derived from derivatives are classified in the consolidated statements of cash flows in the same category as the consolidated balance sheet account of the underlying item.

As of December 31, 2015, we did not have any derivatives that were accounted for as hedging instruments. The cash flows derived from all derivatives are classified in the operating section of the consolidated statements of cash flows.

### ***Interest Rate Derivatives***

We use interest rate derivative contracts to align our portfolio of interest bearing assets and liabilities with our risk management objectives. During 2015, we entered into five cross currency interest rate swaps through 2025 for a total notional amount of €180.0 million which qualify for hedge accounting as cash flow hedges. We determined that no ineffectiveness exists related to these swaps. As of December 31, 2016, the €180.0 million notional swap amount had an aggregate fair value, of \$1.4 million and accrued and unpaid interest of \$1.7 million which are in other non-current assets and other current assets, respectively, in the accompanying consolidated balance sheet. As of December 31, 2015, this swap had a fair value of \$5.3 million and accrued and unpaid interest of \$1.6 million which are recorded in other non-current assets and other current assets, respectively, in the accompanying consolidated balance sheet.

During 2014, we entered into interest rate swaps, which effectively fixed the fair value of \$200.0 million of our fixed rate private placement debt. As of December 31, 2016, the \$200.0 million notional swap amount had a fair value of \$3.1 million and accrued and unpaid interest of \$0.6 million which are recorded in other non-current assets and other current assets, respectively, in the accompanying consolidated balance sheet. As of December 31, 2015, this swap had a fair value of \$5.0 million and accrued and unpaid interest of \$0.8 million which are recorded in other non-current assets and other current assets, respectively, in the accompanying consolidated balance sheet. During the years ended December 31, 2016 and 2015, (losses) of \$(1.9) million and gains of \$1.7 million, respectively, are recorded in other financial expense, net in the accompanying consolidated income statements.

### ***Call Spread Overlay***

We entered into Call Options during 2014 which, along with the sale of the Warrants, represent the Call Spread Overlay entered into in connection with the Cash Convertible Notes and which are more fully described in Note 15. We used \$105.2 million of the proceeds from the issuance of the Cash Convertible Notes to pay the premium for the Call Options, and simultaneously received \$68.9 million (net of issuance costs) from the sale of the Warrants, for a net cash outlay of \$36.3 million for the Call Spread Overlay. The Call Options are intended to offset cash payments in excess of the principal amount due upon any conversion of the Cash Convertible Notes.

Aside from the initial payment of a premium of \$105.2 million for the Call Options, we will not be required to make any cash payments under the Call Options. We will, however, be entitled to receive under the terms of the Call Options an amount of cash generally equal to the amount by which the market price per share of our common stock exceeds the exercise price of the Call Options during the relevant valuation period. The exercise price under the Call Options is equal to the conversion price of the Cash Convertible Notes.

The Call Options, for which our common stock is the underlying security, are a derivative asset that requires mark-to-market accounting treatment due to the cash settlement features until the Call Options settle or expire. The Call Options are measured and reported at fair value on a recurring basis, within Level 2 of the fair value hierarchy. For further discussion of the inputs used to determine the fair value of the Call Options, refer to Note 23. The fair value of the Call Options at December 31, 2016 and 2015 was approximately \$185.8 million and \$169.0 million, respectively, which are recorded in other non-current assets in the accompanying consolidated balance sheets. For the years ended December 31, 2016 and 2015, the change in the fair value of the Call Options resulted in gains of \$16.7 million and \$21.3 million, respectively, which are recognized in other financial expense, net in the accompanying consolidated statements of income.

The Warrants represent approximately 25.8 million shares of our common stock (subject to antidilution adjustments under certain circumstances) with an initial exercise price of \$32.085 per share, subject to customary adjustments. The proceeds, net of issuance costs, from the sale of the Warrants of approximately \$68.9 million are included as other non-current liabilities in the accompanying balance sheet. The Warrants expire as follows: warrants to purchase 15.2 million shares expire over a period of 50 trading days beginning on December 27, 2018 and Warrants to purchase 10.6 million shares expire over a period of 50 trading days beginning on December 29, 2020. Following the synthetic share repurchase discussed in Note 17, the adjusted exercise price is \$32.056. The Warrants are exercisable only upon expiration. For each Warrant that is exercised, we will deliver to the holder a number of shares of our common stock equal to the amount by which the settlement price exceeds the exercise price, divided by the settlement price, plus cash in lieu of any fractional shares. The Warrants could separately have a dilutive effect on shares of our common stock to the extent that the market value per share of our common stock exceeds the applicable exercise price of the Warrants (as measured under the terms of the Warrants). The fair value of the Warrants at December 31, 2016 and 2015, was approximately \$154.3 million and \$137.5 million, respectively, which are recorded in other non-current

liabilities in the accompanying consolidated balance sheet. For the years ended December 31, 2016 and 2015, the change in the fair value of the Warrants resulted in losses of \$16.9 million and \$12.3 million, respectively, which are recognized in other financial expense, net in the accompanying consolidated statements of income.

### ***Cash Convertible Notes Embedded Cash Conversion Option***

The embedded cash conversion option within the Cash Convertible Notes are required to be separated from the Cash Convertible Notes and accounted for separately as a derivative liability, with changes in fair value reported in our consolidated statements of income in other financial expense, net until the cash conversion option settles or expires. For further discussion of the Cash Convertible Notes, refer to Note 15. The initial fair value liability of the embedded cash conversion option was \$105.2 million, which simultaneously reduced the carrying value of the Cash Convertible Notes (effectively an original issuance discount). The embedded cash conversion option is measured and reported at fair value on a recurring basis, within Level 2 of the fair value hierarchy. For further discussion of the inputs used to determine the fair value of the embedded cash conversion option, refer to Note 23. The fair value of the embedded cash conversion option at December 31, 2016 and 2015, was approximately \$187.5 million and \$171.0 million which are recorded in other non-current liabilities in the accompanying balance sheets. For the year ended December 31, 2016 and 2015, the change in the fair value of the embedded cash conversion option resulted in losses of \$16.6 million and \$21.5 million, respectively, recognized in other financial expense, net.

### ***Foreign Currency Derivatives***

As a globally active enterprise, we are subject to risks associated with fluctuations in foreign currencies in our ordinary operations. This includes foreign currency-denominated receivables, payables, debt, and other balance sheet positions including intercompany items. We manage balance sheet exposure on a group-wide basis using foreign exchange forward contracts, foreign exchange options and cross-currency swaps.

We are party to various foreign exchange forward, option and swap arrangements which had, at December 31, 2016, an aggregate notional value of \$347.6 million and fair value of \$3.2 million included in other current assets and \$6.1 million included in other current liabilities, respectively, which expire at various dates through December 2017.

We were party to various foreign exchange forward and swap arrangements which had, at December 31, 2015, an aggregate notional value of \$264.2 million and fair values of \$1.4 million and \$0.5 million included in other current assets and other current liabilities, respectively, and which expired at various dates through March 2016. The transactions have been entered into to offset the effects from short-term balance sheet exposure to foreign currency exchange risk. Changes in the fair value of these arrangements have been recognized in other financial expense, net.

### **Fair Values of Derivative Instruments**

The following table summarizes the fair value amounts of derivative instruments reported in the consolidated balance sheets as of December 31, 2016 and 2015:

| (in thousands)                                     | Derivatives in Asset Positions<br>Fair value |                   | Derivatives in Liability Positions<br>Fair value |                     |
|----------------------------------------------------|----------------------------------------------|-------------------|--------------------------------------------------|---------------------|
|                                                    | 12/31/2016                                   | 12/31/2015        | 12/31/2016                                       | 12/31/2015          |
| <b>Derivative instruments designated as hedges</b> |                                              |                   |                                                  |                     |
| Interest rate contracts <sup>(1)</sup>             | \$ 3,043                                     | \$ 6,909          | \$ —                                             | \$ —                |
| Total derivative instruments designated as hedges  | <u>\$ 3,043</u>                              | <u>\$ 6,909</u>   | <u>\$ —</u>                                      | <u>\$ —</u>         |
| <b>Undesignated derivative instruments</b>         |                                              |                   |                                                  |                     |
| Interest rate contracts <sup>(1)</sup>             | \$ 3,612                                     | \$ 5,778          | \$ —                                             | \$ —                |
| Call spread overlay                                | 185,750                                      | 169,037           | (154,347)                                        | (137,457)           |
| Cash conversion options                            | —                                            | —                 | (187,546)                                        | (170,951)           |
| Foreign exchange contracts                         | 3,154                                        | 1,393             | (6,089)                                          | (525)               |
| Total undesignated derivative instruments          | <u>\$ 192,516</u>                            | <u>\$ 176,208</u> | <u>\$ (347,982)</u>                              | <u>\$ (308,933)</u> |

<sup>(1)</sup> The fair value amounts for the interest rate contracts include accrued interest.

### **Gains and Losses on Derivative Instruments**

The following tables summarize the classification and gains and losses on derivative instruments for the years ended December 31, 2016 and 2015:

| Year-Ended December 31, 2016 (in thousands)        | Gain/(loss)<br>recognized in<br>equity | Location of<br>(gain) loss in<br>income statement | (Gain) loss<br>reclassified<br>from equity into<br>income | Gain<br>(loss) recognized<br>in income |
|----------------------------------------------------|----------------------------------------|---------------------------------------------------|-----------------------------------------------------------|----------------------------------------|
| <b>Derivative instruments designated as hedges</b> |                                        |                                                   |                                                           |                                        |
| Interest rate contracts                            | \$ (3,969)                             |                                                   | \$ (6,228)                                                | n/a                                    |
| <b>Undesignated derivative instruments</b>         |                                        |                                                   |                                                           |                                        |
| Interest rate contracts                            | n/a                                    | Other financial<br>expense, net                   | n/a                                                       | \$ (1,930)                             |
| Call spread overlay                                | n/a                                    | Other financial<br>expense, net                   | n/a                                                       | (177)                                  |
| Cash conversion option                             | n/a                                    | Other financial<br>expense, net                   | n/a                                                       | (16,595)                               |
| Foreign exchange contracts                         | n/a                                    | Other financial<br>expense, net                   | n/a                                                       | (6,072)                                |
|                                                    |                                        |                                                   |                                                           | <u>\$ (24,774)</u>                     |

| Year-Ended December 31, 2015 (in thousands)        | Gain/(loss)<br>recognized in<br>equity | Location of<br>(gain) loss in<br>income statement | (Gain) loss<br>reclassified<br>from equity into<br>income | Gain<br>(loss) recognized<br>in income |
|----------------------------------------------------|----------------------------------------|---------------------------------------------------|-----------------------------------------------------------|----------------------------------------|
| <b>Derivative instruments designated as hedges</b> |                                        |                                                   |                                                           |                                        |
| Interest rate contracts                            | \$ 5,337                               |                                                   | \$ (5,273)                                                | n/a                                    |
| <b>Undesignated derivative instruments</b>         |                                        |                                                   |                                                           |                                        |
| Interest rate contracts                            | n/a                                    | Other financial<br>expense, net                   | n/a                                                       | \$ 1,691                               |
| Call spread overlay                                | n/a                                    | Other financial<br>expense, net                   | n/a                                                       | 8,994                                  |
| Cash conversion option                             | n/a                                    | Other financial<br>expense, net                   | n/a                                                       | (21,501)                               |
| Foreign exchange contracts                         | n/a                                    | Other financial<br>expense, net                   | n/a                                                       | 21,434                                 |
|                                                    |                                        |                                                   |                                                           | <u>\$ 10,618</u>                       |

## 25. Additional Information for Financial Instruments

The tables below present the carrying amounts, measurements in accordance with IAS 39 and fair values as of December 31, 2016 and 2015:

| December 31, 2016 (US\$ thousands)                       | Category | Total Carrying Amount | Amortized Cost | Cost   | At Fair Value |
|----------------------------------------------------------|----------|-----------------------|----------------|--------|---------------|
| <b>Assets</b>                                            |          |                       |                |        |               |
| Cash and cash equivalents                                | LaR      | 439,180               | 439,180        | —      | —             |
| Available-for-sale assets                                | AfS      | 135,236               | —              | 38,173 | 97,063        |
| Trade accounts receivable                                | LaR      | 278,244               | 278,244        | —      | —             |
| Derivatives designated as hedges                         | N/A      | 3,043                 | —              | —      | 3,043         |
| Undesignated derivatives                                 | FVTPL    | 192,516               | —              | —      | 192,516       |
| <b>Liabilities</b>                                       |          |                       |                |        |               |
| Financial debts                                          | FLAC     | (1,064,041)           | (1,064,041)    | —      | (1,232,575)   |
| Finance lease obligations                                | N/A      | (2,555)               | (2,555)        | —      | —             |
| Trade accounts payable                                   | FLAC     | (51,218)              | (51,218)       | —      | —             |
| Undesignated derivatives                                 | FVTPL    | (347,982)             | —              | —      | (347,982)     |
| Contingent consideration                                 | FVTPL    | (8,754)               | —              | —      | (8,754)       |
| <b>Aggregated by category</b>                            |          |                       |                |        |               |
| Loans and Receivables (LaR)                              |          | 717,424               | 717,424        | —      | —             |
| Available-for-sale Financial Assets (AfS)                |          | 135,236               | —              | 38,173 | 97,063        |
| Financial Liabilities measured at Amortized Cost (FLAC)  |          | (2,347,834)           | (1,115,259)    | —      | (1,232,575)   |
| Instruments at fair value through profit or loss (FVTPL) |          | (164,220)             | —              | —      | (164,220)     |

| December 31, 2015 (US\$ thousands)                       | Category | Total Carrying Amount | Amortized Cost | Cost   | At Fair Value |
|----------------------------------------------------------|----------|-----------------------|----------------|--------|---------------|
| <b>Assets</b>                                            |          |                       |                |        |               |
| Cash and cash equivalents                                | LaR      | 290,011               | 290,011        | —      | —             |
| Available-for-sale assets                                | AfS      | 151,471               | —              | 17,169 | 134,302       |
| Trade accounts receivable                                | LaR      | 273,853               | 273,853        | —      | —             |
| Derivatives designated as hedges                         | N/A      | 6,909                 | —              | —      | 6,909         |
| Undesignated derivatives                                 | FVTPL    | 176,208               | —              | —      | 176,208       |
| <b>Liabilities</b>                                       |          |                       |                |        |               |
| Financial debts                                          | FLAC     | (1,044,041)           | (1,044,041)    | —      | (1,250,807)   |
| Finance lease obligations                                | N/A      | (3,342)               | (3,342)        | —      | —             |
| Trade accounts payable                                   | FLAC     | (52,306)              | (52,306)       | —      | —             |
| Undesignated derivatives                                 | FVTPL    | (308,933)             | —              | —      | (308,933)     |
| Contingent consideration                                 | FVTPL    | (17,678)              | —              | —      | (17,678)      |
| <b>Aggregated by category</b>                            |          |                       |                |        |               |
| Loans and receivables (LaR)                              |          | 563,864               | 563,864        | —      | —             |
| Available-for-sale financial assets (AfS)                |          | 151,471               | —              | 17,169 | 134,302       |
| Financial liabilities measured at amortized cost (FLAC)  |          | (2,347,154)           | (1,096,347)    | —      | (1,250,807)   |
| Instruments at fair value through profit or loss (FVTPL) |          | (150,403)             | —              | —      | (150,403)     |

Cash and cash equivalents, notes receivable, trade accounts receivable and other assets have short times to maturity. For this reason, their carrying amounts at the reporting date approximate the fair values.

Investments in unquoted equity instruments shown as available-for-sale assets are measured at cost as their fair values cannot be measured reliably due to the lack of reliable information needed for the determination of the fair values. However, it is estimated that the carrying amounts of these investment approximate their fair values.

The fair values of other non-current assets correspond to the present values of the payments related to the assets, taking into account the current interest rate parameters that reflect market and partner-based changes to terms and conditions and expectations.

Trade accounts payable generally have short times to maturity; the value reported approximates the fair value.

The fair values of the quoted financial debts equal the nominal amounts multiplied by the price quotations at the reporting date. The fair values of other financial liabilities are calculated as the present values of the payments associated with the liabilities.

As of December 31, 2016 and 2015, fair values of financial debts amount to \$1,232.6 million and \$1,250.8 million, respectively. The carrying amounts of all other financial assets and financial liabilities approximate their fair values.

As of December 31, 2016 and 2015, there are no significant concentrations of risks arising from financial instruments.

The table below presents the carrying amounts of financial instruments and their fair values as of December 31, 2016 and 2015:

| (in US\$ thousands)                                       | December 31, 2016 |             | December 31, 2015 |             |
|-----------------------------------------------------------|-------------------|-------------|-------------------|-------------|
|                                                           | Carrying Amount   | Fair Value  | Carrying Amount   | Fair Value  |
| <b>Financial assets</b>                                   |                   |             |                   |             |
| Cash and cash equivalents                                 | 439,180           | 439,180     | 290,011           | 290,011     |
| Available-for-sale assets                                 | 135,236           | 135,236     | 151,471           | 151,471     |
| Trade accounts receivable                                 | 278,244           | 278,244     | 273,853           | 273,853     |
| Derivatives designated as hedges                          | 3,043             | 3,043       | 6,909             | 6,909       |
| Derivatives measured at fair value through profit or loss | 192,516           | 192,516     | 176,208           | 176,208     |
| <b>Financial liabilities</b>                              |                   |             |                   |             |
| Financial debts                                           | (1,064,041)       | (1,232,575) | (1,044,041)       | (1,250,807) |
| Finance lease obligations                                 | (2,555)           | (2,555)     | (3,342)           | (3,342)     |
| Trade accounts payable                                    | (51,218)          | (51,218)    | (52,306)          | (52,306)    |
| Contingent consideration                                  | (8,754)           | (8,754)     | (17,678)          | (17,678)    |
| Instruments measured at fair value through profit or loss | (347,982)         | (347,982)   | (308,933)         | (308,933)   |

### Net Results by Category

| December 31, 2016                                       |                    |                        |                          |                |                    |
|---------------------------------------------------------|--------------------|------------------------|--------------------------|----------------|--------------------|
| (in thousands)                                          | From interest      | Subsequent Measurement |                          | De-recognition | Net result         |
|                                                         |                    | At fair value          | Allowances / Impairments |                |                    |
| Loans and receivables (LaR)                             | \$ 2,155           | \$ —                   | \$ —                     | \$ —           | \$ 2,155           |
| Available-for-sale financial assets (AfS)               | —                  | (1,421)                | —                        | —              | (1,421)            |
| Financial liabilities measured at amortized cost (FLAC) | (35,795)           | —                      | —                        | —              | (35,795)           |
| <b>Net result</b>                                       | <b>\$ (33,640)</b> | <b>\$ (1,421)</b>      | <b>\$ —</b>              | <b>\$ —</b>    | <b>\$ (35,061)</b> |

Interest from financial instruments is recognized in financial expense.

The Company recognizes the other components of net gain/loss in other financial income/expense, except for impairments of trade receivables that are classified as “loans and receivables” which are reported under general and administrative, integration and other expense.

The information for the comparative period is provided below:

| December 31, 2015                                       |                    |                        |                          |                |                    |
|---------------------------------------------------------|--------------------|------------------------|--------------------------|----------------|--------------------|
| (in thousands)                                          | From interest      | Subsequent Measurement |                          | De-recognition | Net result         |
|                                                         |                    | At fair value          | Allowances / Impairments |                |                    |
| Loans and receivables (LaR)                             | \$ 2,411           | \$ —                   | \$ —                     | \$ —           | \$ 2,411           |
| Available-for-sale financial assets (AfS)               | —                  | 1,215                  | (2,189)                  | —              | (974)              |
| Financial liabilities measured at amortized cost (FLAC) | (34,430)           | —                      | —                        | —              | (34,430)           |
| <b>Net result</b>                                       | <b>\$ (32,019)</b> | <b>\$ 1,215</b>        | <b>\$ (2,189)</b>        | <b>\$ —</b>    | <b>\$ (32,993)</b> |

## 26. Capital Management

The primary objectives of the Group's capital management are to safeguard the Group's ability to continue as a going concern and to ensure financial flexibility to execute the Group's strategic growth targets. We regularly review our capital structure to ensure a low cost of capital to enhance shareholder value. The Group's overall strategy remains unchanged from 2015 and we are not subject to any externally imposed capital requirements. All common shares issued are fully paid.

In October 2016, we extended the maturity of our €400 million syndicated revolving credit facility, which now has a contractual lifetime until December 2021 of which no amounts were utilized at December 31, 2016. The facility can be utilized in Euro, British pounds sterling, Swiss franc or U.S. dollar and bears interest of 0.4% to 1.2% above three months EURIBOR, or LIBOR

in relation to any loan not in euro, and is offered with interest periods of one, two, three or six months. We have additional credit lines totaling €36.6 million with no expiration date, none of which were utilized as of December 31, 2016. We also have capital lease obligations, including interest, in the aggregate amount of \$2.7 million, and carry \$1.1 billion of long-term debt as of December 31, 2016.

During August 2016 we announced and in January 2017 completed, a synthetic share repurchase that combined a direct capital repayment with a reverse stock split as discussed in Note 17. Further, we announced additional share repurchases to take place via the open market during the remainder of 2017, with a view to return to our shareholders an aggregate amount of \$300 million in 2017, including the amounts already returned via the synthetic share repurchase. Repurchased shares will be held in treasury in order to satisfy various obligations, which include exchangeable debt instruments and employee share-based remuneration plans.

An important indicator of capital management efforts is the ratio of shareholders' equity compared to total assets as shown in the consolidated statement of financial position:

| (in thousands, except of ratio)                                   | 2016         | 2015         |
|-------------------------------------------------------------------|--------------|--------------|
| Shareholders' equity attributable to equity holders of the parent | \$ 2,509,825 | \$ 2,494,764 |
| Total Assets                                                      | \$ 4,372,755 | \$ 4,193,171 |
| Shareholders' equity ratio in %                                   | 57%          | 59%          |

## 27. Subsequent Events

### *Acquisition*

In January 2017, we acquired OmicSoft Corporation, a privately owned bioinformatics company, that markets a suite of tools that allow customers to analyze and visualize data sets and compare them to large, publicly available multi-omics data sets. The acquisition was not individually significant to the overall consolidated financial statements.

### *Synthetic Share Repurchase*

In January 2017, QIAGEN completed a synthetic share repurchase that combined a direct capital repayment with a reverse stock split as discussed in Note 17 *Equity*.

## 28. Consolidated Companies

The following is a list of the Company's subsidiaries as of December 31, 2016, other than certain subsidiaries that did not in the aggregate constitute a significant subsidiary:

| <b>Company Name</b>                            | <b>Jurisdiction of Incorporation</b> |
|------------------------------------------------|--------------------------------------|
| Amnisure International, LLC                    | USA                                  |
| Cellestis, LLC                                 | USA                                  |
| Cellestis Ltd.                                 | Australia                            |
| MO BIO Laboratories, Inc.                      | USA                                  |
| QIAGEN Aarhus A/S                              | Denmark                              |
| QIAGEN AB                                      | Sweden                               |
| QIAGEN AG                                      | Switzerland                          |
| QIAGEN Australia Holding Pty. Ltd.             | Australia                            |
| QIAGEN Benelux B.V.                            | Netherlands                          |
| QIAGEN Beverly, Inc.                           | USA                                  |
| QIAGEN China (Shanghai) Co. Ltd.               | China                                |
| QIAGEN Deutschland Holding GmbH                | Germany                              |
| QIAGEN Distribution B.V.                       | Netherlands                          |
| QIAGEN U.S. Finance Ltd.                       | Ireland                              |
| QIAGEN Finance (Malta) Ltd.                    | Malta                                |
| QIAGEN France S.A.S.                           | France                               |
| QIAGEN Gaithersburg, Inc.                      | USA                                  |
| QIAGEN GmbH                                    | Germany                              |
| QIAGEN Hamburg GmbH                            | Germany                              |
| QIAGEN Inc. (Canada)                           | Canada                               |
| QIAGEN Inc. (USA)                              | USA                                  |
| QIAGEN Instruments AG                          | Switzerland                          |
| QIAGEN K.K.                                    | Japan                                |
| QIAGEN Korea                                   | South Korea                          |
| QIAGEN Lake Constance GmbH                     | Germany                              |
| QIAGEN Ltd.                                    | UK                                   |
| QIAGEN Manchester Ltd.                         | UK                                   |
| QIAGEN Marseille SA <sup>(1)</sup>             | France                               |
| QIAGEN Mexico, S. de R.L. de C.V.              | Mexico                               |
| QIAGEN North American Holdings Inc.            | USA                                  |
| QIAGEN Pty. Ltd.                               | Australia                            |
| QIAGEN Redwood City, Inc.                      | USA                                  |
| QIAGEN Sciences, LLC                           | USA                                  |
| QIAGEN S.r.l.                                  | Italy                                |
| QIAGEN U.S. Finance Holdings (Luxembourg) SARL | Luxembourg                           |
| QIAGEN Waltham, Inc.                           | USA                                  |
| Quanta BioSciences, Inc.                       | USA                                  |
| SA Biosciences, LLC                            | USA                                  |

<sup>1</sup> Amounts related to noncontrolling interests did not represent a material component of the consolidated financial statements in the years ended December 31, 2016 and 2015.

## 29. Fees Paid to External Auditors

Set forth below are the total fees billed (or expected to be billed), on a consolidated basis, by the independent public accounting firm or their affiliates for providing audit and other professional services in each of the last two years:

| (in millions)                      | 2016          | 2015          |
|------------------------------------|---------------|---------------|
| Audit fees                         | \$ 1.9        | \$ 1.9        |
| -consolidated financial statements | 1.2           | 1.3           |
| -statutory financial statements    | 0.7           | 0.6           |
| Audit related fees                 | 0.5           | 0.1           |
| Total                              | <u>\$ 2.4</u> | <u>\$ 2.0</u> |

Audit-related fees consist of fees and expenses billed for assurance and related services that are related to the performance of the audit or review of QIAGEN's financial statements and include consultations concerning financial accounting and reporting standards and review of the opening balance sheets of newly acquired companies.

Tax fees include fees and expenses billed for tax compliance services, including assistance on the preparation of tax returns and claims for refund; tax consultations, such as assistance and representation in connection with tax audits and appeals. Tax fees for the year ended December 31, 2016 totaled less than \$50,000. All other fees include various fees and expenses billed for services as approved by the Audit Committee.

## **Signatures**

Venlo, the Netherlands, April 6, 2017

QIAGEN N.V.

Peer M. Schatz  
Chief Executive Officer

Roland Sackers  
Chief Financial Officer

**QIAGEN N.V.**  
**COMPANY FINANCIAL STATEMENTS**

**QIAGEN N.V.**  
**COMPANY FINANCIAL STATEMENTS**  
**BALANCE SHEETS**  
**(in thousands)**

|                                                 | <u>Note</u> | <u>December 31, 2016</u> | <u>December 31, 2015</u> |
|-------------------------------------------------|-------------|--------------------------|--------------------------|
| <b>Assets</b>                                   |             |                          |                          |
| Current assets:                                 |             |                          |                          |
| Cash and cash equivalents                       |             | \$ 340,700               | \$ 145,583               |
| Restricted cash                                 |             | —                        | 2,509                    |
| Current available-for-sale financial assets     | (5)         | 89,300                   | 127,143                  |
| Receivables from group companies                |             | 504,284                  | 615,510                  |
| Prepaid and other current assets                |             | 9,302                    | 8,933                    |
| <b>Total current assets</b>                     |             | <b>943,586</b>           | <b>899,678</b>           |
| Non-current assets:                             |             |                          |                          |
| Property, plant and equipment                   | (4)         | 1,300                    | 77                       |
| Goodwill                                        | (3)         | 62,437                   | 92,153                   |
| Other intangible assets                         | (2)         | 154                      | 255                      |
| Non-current available-for-sale financial assets | (5)         | 12,509                   | 13,798                   |
| Financial assets                                | (6)         | 3,204,976                | 3,086,300                |
| Fair value of derivative financial instruments  |             | 190,173                  | 179,359                  |
| Other non-current assets                        |             | 4,333                    | 1,871                    |
| <b>Total non-current assets</b>                 |             | <b>3,475,882</b>         | <b>3,373,813</b>         |
| <b>Total assets</b>                             |             | <b>4,419,468</b>         | <b>4,273,491</b>         |
| <b>Liabilities and equity</b>                   |             |                          |                          |
| Current liabilities:                            |             |                          |                          |
| Accounts payable trade                          |             | 2,075                    | 208                      |
| Accrued liabilities                             |             | 26,573                   | 16,101                   |
| Payables to group companies                     |             | 470,578                  | 406,201                  |
| <b>Total current liabilities</b>                |             | <b>499,226</b>           | <b>422,510</b>           |
| Non-current liabilities:                        |             |                          |                          |
| Non-current financial debts                     | (7)         | 1,064,040                | 1,044,041                |
| Deferred tax liabilities                        |             | 688                      | 567                      |
| Fair value of derivative financial instruments  |             | 341,893                  | 308,408                  |
| Other non-current liabilities                   |             | 3,796                    | 3,201                    |
| <b>Total non-current liabilities</b>            |             | <b>1,410,417</b>         | <b>1,356,217</b>         |
| Equity:                                         |             |                          |                          |
| Common shares                                   |             | 2,653                    | 2,661                    |
| Share premium                                   |             | 1,897,399                | 1,862,835                |
| Retained earnings                               |             | 969,788                  | 859,830                  |
| Net income for the period                       |             | 49,378                   | 132,618                  |
| Legal reserves                                  | (10)        | 40,920                   | 44,390                   |
| Other reserves                                  | (10)        | (330,307)                | (255,158)                |
| Treasury shares                                 |             | (120,006)                | (152,412)                |
| <b>Total equity</b>                             |             | <b>2,509,825</b>         | <b>2,494,764</b>         |
| <b>Total liabilities and equity</b>             |             | <b>\$ 4,419,468</b>      | <b>\$ 4,273,491</b>      |

The accompanying notes are an integral part of these company financial statements.

**QIAGEN N.V.**  
**COMPANY FINANCIAL STATEMENTS**  
**INCOME STATEMENTS**  
**(in thousands)**

|                                                           | <u>Note</u> | <u>Years ended December 31,</u> |                   |
|-----------------------------------------------------------|-------------|---------------------------------|-------------------|
|                                                           |             | <u>2016</u>                     | <u>2015</u>       |
| Other (expense) income                                    | \$          | (82)                            | \$ 439            |
| Operating expenses:                                       |             |                                 |                   |
| Sales and marketing expense                               |             | (3,738)                         | (944)             |
| General and administrative, integration and other expense |             | (16,452)                        | (8,306)           |
| Other operating income                                    |             | 6                               | 678               |
| <b>Total operating expenses</b>                           |             | <b>(20,184)</b>                 | <b>(8,572)</b>    |
| <b>Income from operations</b>                             |             | <b>(20,266)</b>                 | <b>(8,133)</b>    |
| Financial income                                          |             | 5,746                           | 2,950             |
| Financial expense                                         |             | (37,720)                        | (35,735)          |
| Other financial expense, net                              |             | (14,977)                        | (12,369)          |
| <b>Total finance expense, net</b>                         |             | <b>(46,951)</b>                 | <b>(45,154)</b>   |
| <b>Income before income taxes</b>                         |             | <b>(67,217)</b>                 | <b>(53,287)</b>   |
| Income taxes                                              |             | (2,401)                         | (231)             |
| <b>Income after income tax</b>                            |             | <b>(69,618)</b>                 | <b>(53,518)</b>   |
| Results related to associates, after tax                  |             | 118,996                         | 186,136           |
| <b>Net income for the period</b>                          | <b>\$</b>   | <b>49,378</b>                   | <b>\$</b> 132,618 |

The accompanying notes are an integral part of these company financial statements.

QIAGEN N.V.

COMPANY FINANCIAL STATEMENTS

STATEMENTS OF CHANGES IN EQUITY  
(in thousands)

|                                                | Common shares  |                 | Share premium      | Retained earnings | Net income       | Legal reserves  | Other reserves      | Treasury shares |                     | Total shareholders' equity |
|------------------------------------------------|----------------|-----------------|--------------------|-------------------|------------------|-----------------|---------------------|-----------------|---------------------|----------------------------|
|                                                | Shares         | Amount          |                    |                   |                  |                 |                     | Shares          | Amount              |                            |
| <b>BALANCE AT JANUARY 1, 2015</b>              | <b>239,707</b> | <b>\$ 3,185</b> | <b>\$1,948,698</b> | <b>\$ 853,418</b> | <b>\$ 45,133</b> | <b>\$30,425</b> | <b>\$ (129,280)</b> | <b>(7,684)</b>  | <b>\$ (167,190)</b> | <b>\$ 2,584,389</b>        |
| Appropriation of prior year net income         | —              | —               | —                  | 45,133            | (45,133)         | —               | —                   | —               | —                   | —                          |
| Net income for the period                      | —              | —               | —                  | —                 | 132,618          | —               | —                   | —               | —                   | 132,618                    |
| Allocation to legal reserves                   | —              | —               | —                  | (13,965)          | —                | 13,965          | —                   | —               | —                   | —                          |
| Effect from cash flow hedge                    | —              | —               | —                  | —                 | —                | —               | 48                  | —               | —                   | 48                         |
| Effect from available-for-sale financial asset | —              | —               | —                  | —                 | —                | —               | 1,215               | —               | —                   | 1,215                      |
| Effect from foreign currency translation       | —              | (524)           | —                  | 524               | —                | —               | (125,875)           | —               | —                   | (125,875)                  |
| Effect from pension reserve                    | —              | —               | —                  | —                 | —                | —               | (1,266)             | —               | —                   | (1,266)                    |
| Purchase of treasury shares                    | —              | —               | —                  | —                 | —                | —               | —                   | (842)           | (20,818)            | (20,818)                   |
| Stock awards and options                       | —              | —               | 37,221             | (25,280)          | —                | —               | —                   | 1,824           | 35,596              | 47,537                     |
| Redemption of convertible debt                 | —              | —               | (123,084)          | —                 | —                | —               | —                   | —               | —                   | (123,084)                  |
| <b>BALANCE AT DECEMBER 31, 2015</b>            | <b>239,707</b> | <b>\$ 2,661</b> | <b>\$1,862,835</b> | <b>\$ 859,830</b> | <b>\$132,618</b> | <b>\$44,390</b> | <b>\$ (255,158)</b> | <b>(6,702)</b>  | <b>\$ (152,412)</b> | <b>\$ 2,494,764</b>        |

|                                                | Note | Common shares  |                 | Share premium      | Retained earnings | Net income       | Legal reserves  | Other reserves      | Treasury shares |                     | Total shareholders' equity |
|------------------------------------------------|------|----------------|-----------------|--------------------|-------------------|------------------|-----------------|---------------------|-----------------|---------------------|----------------------------|
|                                                |      | Shares         | Amount          |                    |                   |                  |                 |                     | Shares          | Amount              |                            |
| <b>BALANCE AT JANUARY 1, 2016</b>              |      | <b>239,707</b> | <b>\$ 2,661</b> | <b>\$1,862,835</b> | <b>\$ 859,830</b> | <b>\$132,618</b> | <b>\$44,390</b> | <b>\$ (255,158)</b> | <b>(6,702)</b>  | <b>\$ (152,412)</b> | <b>\$ 2,494,764</b>        |
| Appropriation of prior year net income         |      | —              | —               | —                  | 132,618           | (132,618)        | —               | —                   | —               | —                   | —                          |
| Net income for the period                      |      | —              | —               | —                  | —                 | 49,378           | —               | —                   | —               | —                   | 49,378                     |
| Allocation to legal reserves                   | (10) | —              | —               | —                  | 3,470             | —                | (3,470)         | —                   | —               | —                   | —                          |
| Effect from cash flow hedge                    |      | —              | —               | —                  | —                 | —                | —               | (7,648)             | —               | —                   | (7,648)                    |
| Effect from available-for-sale financial asset |      | —              | —               | —                  | —                 | —                | —               | (1,371)             | —               | —                   | (1,371)                    |
| Effect from foreign currency translation       |      | —              | (8)             | —                  | 8                 | —                | —               | (66,780)            | —               | —                   | (66,780)                   |
| Effect from pension reserve                    |      | —              | —               | —                  | —                 | —                | —               | 650                 | —               | —                   | 650                        |
| Purchase of treasury shares                    |      | —              | —               | —                  | —                 | —                | —               | —                   | —               | —                   | —                          |
| Stock awards and options                       |      | —              | —               | 34,564             | (26,138)          | —                | —               | —                   | 1,555           | 32,406              | 40,832                     |
| Redemption of convertible debt                 |      | —              | —               | —                  | —                 | —                | —               | —                   | —               | —                   | —                          |
| <b>BALANCE AT DECEMBER 31, 2016</b>            |      | <b>239,707</b> | <b>\$ 2,653</b> | <b>\$1,897,399</b> | <b>\$ 969,788</b> | <b>\$ 49,378</b> | <b>\$40,920</b> | <b>\$ (330,307)</b> | <b>(5,147)</b>  | <b>\$ (120,006)</b> | <b>\$ 2,509,825</b>        |

The accompanying notes are an integral part of these company financial statements.

**QIAGEN N.V.**  
**NOTES TO THE COMPANY FINANCIAL STATEMENTS**  
**FOR THE YEAR ENDED DECEMBER 31, 2016**

**1. Accounting Policies**

The financial statements of QIAGEN N.V. (the 'Company') included in this section are prepared in accordance with IFRS accounting principles as used in the QIAGEN N.V. Consolidated (the 'Consolidated') Financial Statements, considering the provisions of section 362 of Book 2 of the Netherlands Civil Code. The structure of the Company balance sheets is aligned with the Consolidated balance sheets in order to achieve optimal transparency between the Consolidated financial statements and the Company financial statements. Consequently, the presentation of the Company balance sheets deviates from the Dutch regulations.

Subsidiaries are accounted for using the net equity value in these Company financial statements.

**2. Other Intangible Assets**

Intangible assets represent developed technology, computer software, patent rights and licenses. There were no significant additions to intangible assets during the years ended December 31, 2016 and 2015. The historic cost of intangible assets as of December 31, 2016 and 2015 was \$8.2 million. The accumulated amortization as of December 31, 2016 and 2015 amounted to \$7.9 million. Amortization expense on intangible assets during the year ended December 31, 2016 was \$0.1 million (2015: \$0.3 million).

**3. Goodwill**

The changes in the carrying amount of goodwill for the years ended December 31, 2016 and 2015 are as follows:

| (in thousands)                                           | 2016             | 2015             |
|----------------------------------------------------------|------------------|------------------|
| Goodwill as at January 1 <sup>st</sup>                   | \$ 92,153        | \$ 99,195        |
| Goodwill acquired during the year                        | —                | 3,570            |
| Goodwill transferred to indirectly owned Group companies | (29,495)         | —                |
| Merger of consolidated companies                         | 1,500            | —                |
| Currency adjustments                                     | (1,721)          | (10,612)         |
| Goodwill as at December 31 <sup>st</sup>                 | <u>\$ 62,437</u> | <u>\$ 92,153</u> |

In 2016, the changes in goodwill resulted from the merger of consolidated group companies, goodwill transferred to indirectly owned Group companies and foreign currency translation. In 2015, the changes in goodwill resulted from changes in foreign currency translation together with acquired goodwill from a 2015 acquisition.

**4. Property, Plant and Equipment**

The changes in property, plant and equipment for the years ended December 31, 2016 and 2015 are as follows:

| (in thousands)                                                | 2016            | 2015         |
|---------------------------------------------------------------|-----------------|--------------|
| Property, plant and equipment as at January 1 <sup>st</sup>   | \$ 77           | \$ 167       |
| Additions                                                     | 1,512           | 17           |
| Disposals                                                     | (58)            | —            |
| Depreciation                                                  | (231)           | (107)        |
| Property, plant and equipment as at December 31 <sup>st</sup> | <u>\$ 1,300</u> | <u>\$ 77</u> |

The historic cost as of December 31, 2016 and 2015 for property, plant and equipment was \$2.0 million and \$0.5 million, respectively. Additions of \$1.5 million in 2016 are attributable to the Company's new office space. Disposals during 2016 totaled \$0.1 million and accumulated depreciation as of December 31, 2016 and 2015 was \$0.6 million and \$0.4 million, respectively.

**5. Available-for-sale Financial Assets**

At December 31, 2016, the Company had short-term investments in unquoted debt securities which had a fair market value and cost of approximately \$89.3 million (2015: \$127.1 million) in current available-for-sale financial instruments. At December 31, 2016, the Company holds investments of \$10.3 million for noncontrolling interests in privately-held companies which are classified as non-current available-for-sale equity securities (2015: \$10.3 million). The investments are accounted for under the cost-method. At December 31, 2016, the Company holds an investment of \$2.2 million for noncontrolling interests in a publicly-held company which is classified as non-current available-for-sale equity securities (2015: \$3.5 million).

| (in thousands)                                          | 2016              | 2015              |
|---------------------------------------------------------|-------------------|-------------------|
| Unquoted equity securities                              | \$ 10,312         | \$ 10,313         |
| Quoted equity securities                                | 2,197             | 3,485             |
| Unquoted debt securities                                | 89,300            | 127,143           |
| <b>Available-for-sale financial assets</b>              | <b>\$ 101,809</b> | <b>\$ 140,941</b> |
| thereof current available-for-sale financial assets     | \$ 89,300         | \$ 127,143        |
| thereof non-current available-for-sale financial assets | \$ 12,509         | \$ 13,798         |

## 6. Financial Assets

The financial assets are presented in the statements of financial position based on either their net asset value in accordance with the aforementioned accounting principles of the Consolidated Financial Statements, or at amortized cost.

| (in thousands)           | Total               | Investments in subsidiaries | Participation interest | Loans receivable  |
|--------------------------|---------------------|-----------------------------|------------------------|-------------------|
| <b>January 1, 2015</b>   | <b>\$ 2,847,185</b> | <b>\$ 2,437,622</b>         | <b>\$ 3,631</b>        | <b>\$ 405,932</b> |
| Increases                | 353,830             | 11,714                      | —                      | 342,116           |
| Decreases                | (48,136)            | (42,294)                    | (398)                  | (5,444)           |
| Dividends received       | (105,098)           | (105,098)                   | —                      | —                 |
| Share of net profit      | 38,519              | 39,226                      | (707)                  | —                 |
| <b>December 31, 2015</b> | <b>\$ 3,086,300</b> | <b>\$ 2,341,170</b>         | <b>\$ 2,526</b>        | <b>\$ 742,604</b> |

| (in thousands)           | Total               | Investments in subsidiaries | Participation interest | Loans receivable  |
|--------------------------|---------------------|-----------------------------|------------------------|-------------------|
| <b>January 1, 2016</b>   | <b>\$ 3,086,300</b> | <b>\$ 2,341,170</b>         | <b>\$ 2,526</b>        | <b>\$ 742,604</b> |
| Increases                | 232,878             | 158,714                     | —                      | 74,164            |
| Decreases                | (15,949)            | —                           | —                      | (15,949)          |
| Dividends received       | (98,132)            | (98,132)                    | —                      | —                 |
| Share of net profit      | (121)               | (39)                        | (82)                   | —                 |
| <b>December 31, 2016</b> | <b>\$ 3,204,976</b> | <b>\$ 2,401,713</b>         | <b>\$ 2,444</b>        | <b>\$ 800,819</b> |

## 7. Financial Debts

Information on the non-current financial debts of \$398.9 million related to the Private Placement and \$665.2 million related to the Cash Convertible Notes due in 2019 and 2021 are provided under Note 15 to the Consolidated Financial Statements of the Group.

## 8. Common Shares

The authorized classes of our shares consist of Common Shares, Preference Shares and Financing Preference Shares. No Financing Preference Shares or Preference Shares have been issued. The Company had the following authorized shares issued and outstanding as of December 31, 2016 and 2015:

| <b>Authorized, (in thousands)</b>             | <b>2016</b>    | <b>2015</b>    |
|-----------------------------------------------|----------------|----------------|
| Common shares                                 | 410,000        | 410,000        |
| Preference shares                             | 450,000        | 450,000        |
| Financing preference shares                   | 40,000         | 40,000         |
| <b>At December 31st</b>                       | <b>900,000</b> | <b>900,000</b> |
| <b>Issued and outstanding, (in thousands)</b> | <b>2016</b>    | <b>2015</b>    |
| Common shares issued                          | 239,707        | 239,707        |
| Treasury shares                               | (5,147)        | (6,702)        |
| <b>Outstanding at December 31st</b>           | <b>234,560</b> | <b>233,005</b> |
| <b>Par value in EUR per share</b>             | <b>2016</b>    | <b>2015</b>    |
| Common shares                                 | 0.01           | 0.01           |
| Preference shares                             | 0.01           | 0.01           |
| Financing preference shares                   | 0.01           | 0.01           |
| <b>Par value (in thousands)</b>               | <b>2016</b>    | <b>2015</b>    |
| Common shares issued at December 31st in EUR  | 2,397          | 2,397          |
| Common shares issued at December 31st in USD  | 2,653          | 2,661          |

## 9. Subsidiaries

The following is a list of the Company's subsidiaries as of December 31, 2016, other than certain subsidiaries that did not in the aggregate constitute a significant subsidiary:

| Company Name                                   | Jurisdiction of Incorporation | Ownership | Voting Rights |
|------------------------------------------------|-------------------------------|-----------|---------------|
| Amnisure International, LLC                    | USA                           | 100%      | 100%          |
| Cellectis, LLC                                 | USA                           | 100%      | 100%          |
| Cellectis Ltd.                                 | Australia                     | 100%      | 100%          |
| MO BIO Laboratories, Inc.                      | USA                           | 100%      | 100%          |
| QIAGEN Aarhus A/S                              | Denmark                       | 100%      | 100%          |
| QIAGEN AB                                      | Sweden                        | 100%      | 100%          |
| QIAGEN AG                                      | Switzerland                   | 100%      | 100%          |
| QIAGEN Australia Holding Pty. Ltd.             | Australia                     | 100%      | 100%          |
| QIAGEN Benelux B.V.                            | Netherlands                   | 100%      | 100%          |
| QIAGEN Beverly, Inc.                           | USA                           | 100%      | 100%          |
| QIAGEN China (Shanghai) Co. Ltd.               | China                         | 100%      | 100%          |
| QIAGEN Deutschland Holding GmbH                | Germany                       | 100%      | 100%          |
| QIAGEN Distribution B.V.                       | Netherlands                   | 100%      | 100%          |
| QIAGEN U.S. Finance Ltd.                       | Ireland                       | 100%      | 100%          |
| QIAGEN Finance (Malta) Ltd.                    | Malta                         | 100%      | 100%          |
| QIAGEN France S.A.S.                           | France                        | 100%      | 100%          |
| QIAGEN Gaithersburg, Inc.                      | USA                           | 100%      | 100%          |
| QIAGEN GmbH                                    | Germany                       | 100%      | 100%          |
| QIAGEN Hamburg GmbH                            | Germany                       | 100%      | 100%          |
| QIAGEN Inc. (Canada)                           | Canada                        | 100%      | 100%          |
| QIAGEN Inc. (USA)                              | USA                           | 100%      | 100%          |
| QIAGEN Instruments AG                          | Switzerland                   | 100%      | 100%          |
| QIAGEN K.K.                                    | Japan                         | 100%      | 100%          |
| QIAGEN Korea                                   | South Korea                   | 100%      | 100%          |
| QIAGEN Lake Constance GmbH                     | Germany                       | 100%      | 100%          |
| QIAGEN Ltd.                                    | UK                            | 100%      | 100%          |
| QIAGEN Manchester Ltd.                         | UK                            | 100%      | 100%          |
| QIAGEN Marseille SA                            | France                        | 100%      | 100%          |
| QIAGEN Mexico, S. de R.L. de C.V.              | Mexico                        | 100%      | 100%          |
| QIAGEN North American Holdings Inc.            | USA                           | 100%      | 100%          |
| QIAGEN Pty. Ltd.                               | Australia                     | 100%      | 100%          |
| QIAGEN Redwood City, Inc.                      | USA                           | 100%      | 100%          |
| QIAGEN Sciences, LLC                           | USA                           | 100%      | 100%          |
| QIAGEN S.r.l.                                  | Italy                         | 100%      | 100%          |
| QIAGEN U.S. Finance Holdings (Luxembourg) SARL | Luxembourg                    | 100%      | 100%          |
| QIAGEN Waltham, Inc.                           | USA                           | 100%      | 100%          |
| Quanta BioSciences, Inc.                       | USA                           | 100%      | 100%          |
| SA Biosciences, LLC                            | USA                           | 100%      | 100%          |

## 10. Legal Reserve and Other Reserves

Legal reserves as of December 31, 2016 and 2015 were \$40.9 million and \$44.4 million, respectively. The legal reserves were set up in connection with the capitalized development costs as described in Note 11 to the Consolidated Financial Statements of the Group. As a result of the capitalization and subsequent amortization of these capitalized development costs, the net impact on the legal reserves was \$(3.5) million and \$14.0 million for the years ended December 31, 2016 and 2015, respectively.

Other reserves as of December 31, 2016 and 2015 were \$(330.3) million and \$(255.2) million, respectively, and include the amounts as shown in the table below.

| (in thousands)                                     | 2016         | 2015         |
|----------------------------------------------------|--------------|--------------|
| Cumulative foreign currency translation adjustment | \$ (321,053) | \$ (254,273) |
| Pension reserve                                    | (1,498)      | (2,148)      |
| Cash flow hedge reserve                            | (7,600)      | 48           |
| Available-for-sale reserve                         | (156)        | 1,215        |
| Other reserves                                     | \$ (330,307) | \$ (255,158) |

The amounts noted in the table above for other reserves include adjustment for the impact of deferred income taxes.

## 11. Employee Information

| Average Number of Employees | 2016         | 2015         |
|-----------------------------|--------------|--------------|
| Research & Development      | 1,007        | 985          |
| Sales                       | 1,836        | 1,687        |
| Production                  | 998          | 1,009        |
| Marketing                   | 311          | 312          |
| Administration              | 470          | 458          |
| Total                       | <u>4,622</u> | <u>4,451</u> |

The average number of employees working outside the Netherlands during the year ended December 31, 2016 was 4,572 (2015: 4,429).

Information on personnel costs is provided under Note 21 to the Consolidated Financial Statements of the Group.

## 12. Remuneration of Directors and Officers

Information on remuneration of the members of the Managing and Supervisory Board is provided under Note 22 to the Consolidated Financial Statements of the Group. Information on the remuneration policy is provided in the Corporate Governance Report.

## 13. Auditor Fees

At our 2016 Annual General Meeting of Shareholders on June 21, 2016, our shareholders appointed KPMG Accountants N.V. to serve as our external auditor for our statutory consolidated financial statements prepared in accordance with International Financial Reporting Standards for the year ended December 31, 2016. Set forth below are the total fees billed (or expected to be billed), on a consolidated basis:

| (in thousands)                           | 2016            |                       | 2015            |                       |
|------------------------------------------|-----------------|-----------------------|-----------------|-----------------------|
|                                          | KPMG Network    | KPMG Accountants N.V. | KPMG Network    | KPMG Accountants N.V. |
| Audit fees                               | \$ 1,791        | \$ 108                | \$ 1,762        | \$ 123                |
| -consolidated financial statements       | 1,126           | 108                   | 1,126           | 123                   |
| -statutory financial statements          | 665             | —                     | 636             | —                     |
| Audit-related fees                       | 467             | —                     | 110             | —                     |
| <b>Service fees to external auditors</b> | <b>\$ 2,258</b> | <b>\$ 108</b>         | <b>\$ 1,872</b> | <b>\$ 123</b>         |

Audit-related fees consist of fees and expenses billed for assurance and related services that are related to the performance of the audit or review of QIAGEN's financial statements and include consultations concerning financial accounting and reporting standards and review of the opening balance sheets of newly acquired companies.

Tax fees include fees and expenses billed for tax compliance services, including assistance on the preparation of tax returns and claims for refund; tax consultations, such as assistance and representation in connection with tax audits and appeals. Tax fees for the year ended December 31, 2016 totaled less than \$50,000. All other fees include various fees and expenses billed for services as approved by the Audit Committee.

## 14. Provisions in the Articles of Association Governing the Appropriation of Net Income

According to Article 40 till 42 of the Articles of Association, the allocation of net income will be as follows. Subject to certain exceptions, dividends may only be paid out of profits as shown in our annual report as adopted by the General Meeting of Shareholders. Distributions may not be made if the distribution would reduce the shareholders' equity below the sum of the paid-up capital and any reserves required by Dutch Law or the Articles.

Out of profits, dividends must first be paid on any outstanding Preference Shares (the "Preference Share Dividend") in a percentage (the "Preference Share Dividend Percentage") of the obligatory amount (call) paid up on such shares at the beginning of the fiscal year in respect of which the distribution is made. The Preference Share Dividend Percentage is equal to the Average Main Refinancing Rates during the financial year for which the distribution is made. Average Main Refinancing

Rate shall be made understood to mean the average value on each individual day during the financial year for which the distribution is made of the Main Refinancing Rates prevailing on such day. Main Refinancing Rate shall be understood to mean the rate of the Main Refinancing Operation as determined and published from time to time by the European Central Bank. If and to the extent that profits are not sufficient to pay the Preference Share Dividend in full, the deficit shall be paid out of the reserves, with the exception of any reserve, which was formed as share premium reserve upon the issue of Financing Preference Shares. If in any fiscal year the profit is not sufficient to make the distributions referred to above and if no distribution or only a partial distribution is made from the reserves referred to above, such that the deficit is not fully made good no further distributions will be made as described below until the deficit has been made good.

Out of profits remaining after payment of any dividends on Preference Shares such amounts shall be kept in reserve as determined by the Supervisory Board. Out of any remaining profits not allocated to reserve, a dividend shall be paid on the Financing Preference Shares in a percentage over the par value, increased by the amount of share premium that was paid upon the first issue of Financing Preference Shares, which percentage is related to the average effective yield on the prime interest rate on corporate loans in the United States as quoted in the Wall Street Journal. If and to the extent that the profits are not sufficient to pay the Financing Preference Share Dividend in full, the deficit may be paid out of the reserves if the Managing Board so decides with the approval of the Supervisory Board, with the exception of the reserve which was formed as share premium upon the issue of Financing Preference Shares.

Insofar as the profits have not been distributed or allocated to the reserves as specified above, they are at the free disposal of the General Meeting of Shareholders, provided that no further dividends will be distributed on the Preference Shares or the Financing Preference Shares.

The General Meeting may resolve, on the proposal of the Supervisory Board, to distribute dividends or reserves, wholly or partially, in the form of QIAGEN shares.

### **Proposal for Profit Appropriation**

The General Meeting of Shareholders will be asked to approve the following appropriation of the 2016 net income for the period: an amount of \$49.4 million to be added to retained earnings.

## **15. Subsequent Events**

Based on the Company's review, no events or transactions have occurred subsequent to December 31, 2016 other than those described in Note 27 to the Consolidated Financial Statements, that would have a material impact on the financial statements as presented.

Venlo, the Netherlands, April 6, 2017

QIAGEN N.V.

Peer M. Schatz

Roland Sackers

## Signatures

Venlo, the Netherlands, April 6, 2017

QIAGEN N.V.

Peer M. Schatz  
Chief Executive Officer

Roland Sackers  
Chief Financial Officer

# Independent auditor's report

To: the General Meeting of Shareholders and the Supervisory Board of QIAGEN N.V.

## Report on the audit of the annual financial statements 2016

### Our Opinion

In our opinion:

- The accompanying consolidated financial statements give a true and fair view of the financial position of QIAGEN N.V. as at December 31, 2016, and of its result and its cash flows for 2016 in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Netherlands Civil Code;
- The accompanying company financial statements give a true and fair view of the financial position of QIAGEN N.V. as at December 31, 2016, and of its result for 2016 in accordance with Part 9 of Book 2 of the Netherlands Civil Code.

### What we have audited

We have audited the financial statements 2016 of QIAGEN N.V., based in Venlo, Netherlands. The financial statements include the consolidated financial statements and the company financial statements.

The consolidated financial statements comprise:

- 1 the consolidated balance sheets as at December 31, 2016;
- 2 the following consolidated statements for 2016: the income statements, the statements of comprehensive income (loss), changes in equity and cash flows; and
- 3 the notes comprising a summary of the significant accounting policies and other explanatory information.

The company financial statements comprise:

- 1 the company balance sheet as at December 31, 2016;
- 2 the company income statements for 2016; and
- 3 the company statements of changes in equity; and
- 4 the notes comprising a summary of the accounting policies and other explanatory information.

### Basis for our opinion

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the 'Our responsibilities for the audit of the financial statements' section of our report.

We are independent of QIAGEN N.V. in accordance with the Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the Verordening gedrags- en beroepsregels accountants (VGBA, Dutch Code of Ethics).

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## Audit approach

### Summary



### Materiality

Based on our professional judgment we determined the materiality for the December 31, 2016 financial statements as a whole at USD 6.5 million (2015: 7.5 million). The materiality is determined with reference to 5% of a normalized pre-tax income (excluding one-time income and expenses, which mainly include restructuring costs and fair value changes on financial instruments). We consider normalized pre-tax income as the most appropriate benchmark as QIAGEN is a listed profit oriented entity. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for qualitative reasons for the users of the financial statements.

We agreed with the Supervisory Board that misstatements in excess of USD 325,000 which are identified during the audit, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

### Scope of the group audit

QIAGEN N.V. is head of a group of entities. The financial information of this group is included in the consolidated financial statements of QIAGEN N.V. Decisive were the size and/or the risk profile of the group entities or operations. On this basis, we selected group entities for which an audit or specified audit procedures had to be carried out on the complete set of financial information or specific items. This resulted in a coverage of 91% of pre-tax income, 90% of revenue and 89% of total assets.

Because we are ultimately responsible for the opinion, we are also responsible for directing, supervising and performing the group audit. In this respect we have determined the nature and extent of the audit procedures to be carried out for group entities.

We have:

- performed audit procedures at group and business group level.
- used the work of component auditors when auditing or performing specified audit procedures at group and local entity level.

For the remaining entities, we performed amongst others specified audit procedures and review procedures to validate our assessment that there are no significant risks of material misstatement within these.

The group audit team set materiality levels for the audits of components, which ranged from USD 0.55 million to USD 6 million, based on the judgment of the group audit team given the mix of size and risk profile of the entities within the group.

The group audit team has sent detailed instructions to all component auditors' part of the group audit, which includes the significant risk areas that should be covered and sets out the information required to be reported to the group audit team. The group audit team visited entity locations in the US, Poland and Germany. Telephone conversations were also held with component auditors that form part of the group audit. During these visits and telephone conferences, the audit approach, the findings, and observations reported to the group audit team were discussed in more detail. For certain components a file review has also been performed.

By performing the procedures mentioned above at group entities, together with additional procedures at group level, we have been able to obtain sufficient and appropriate audit evidence about the group's financial information to provide an opinion about the financial statements.



### Our key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements. We have communicated the key audit matters to the Supervisory Board. The key audit matters are not a comprehensive reflection of all matters discussed.

These matters were addressed in the context of our audit of the financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

### Impairment test of intangible assets with finite useful lives



#### Description

Under EU-IFRS, QIAGEN assesses at the end of each reporting period whether there is any indication that intangible assets with a finite useful lives (long lived assets), comprising developed technology, patent and license rights, computer software, development costs, and other intellectual properties, may be impaired. If any such indications exist, an impairment test is required under which QIAGEN determines the recoverable amount of the asset, as disclosed in Note 12 of the financial statements. The impairment tests were significant to our audit due to the complexity of the assessment process, judgments and assumptions involved which are affected by expected future market and economic developments.



#### Our response

We assessed the potential impairment indicators, such as acquisitions which make existing technologies redundant, development of new technologies. When impairment triggers were identified the recoverable amount, as the highest of fair value less costs of disposal and the value in use, has been critically assessed during our audit. The assumptions, methodologies, and data used in the impairment tests have been tested. In performing these procedures we assessed Management's sensitivity analyses of the recoverable amount, through inquiries with the appropriate levels of Management as well as comparisons to external and historical data, such as external growth expectations and retrospective reviews. We involved our valuation specialists to assist us in assessing the valuation models applied. Based on the procedures performed the impairment charge has been appropriately recorded and disclosed in Note 12 of the financial statements.

## Valuation of deferred tax assets



### Description

A deferred tax asset is recognized for carried forward losses and other tax attributes that are expected to provide a future benefit. This is considered to be a key judgment by Management as the Effective Tax Rate (ETR) and the recoverability of the recognized tax assets in future periods are based on projected future taxable income attributable to the US, as estimated by QIAGEN Management. As the risk exists that the recognized deferred tax asset is not fully recoverable we consider the valuation of deferred tax assets to be a key audit matter.



### Our response

We involved our tax specialists (local and international) in the audit of the income tax positions to critically assess the assumptions and judgments included in the valuation of deferred tax assets. Our tax specialists also assessed the compliance with relevant local tax laws and regulations as well as assisting the audit team in the evaluation of the feasibility of the Company's tax planning strategies. We also assessed the projected future taxable income amounts used by Management in its evaluation of deferred taxes through testing of key inputs, such as growth rates and market outlooks, and through a retrospective review of the historical accuracy of Management's assumptions. Based on the procedures performed we determined that the deferred tax asset has been appropriately recorded and disclosed in Note 16 of the financial statements.

## Recognition of the Restructuring provision



### Description

In November 2016 QIAGEN announced a series of restructuring initiatives within the QIAGEN group. The restructuring initiatives comprised: portfolio optimization, site closures, support services productivity, marketing productivity and sales channel productivity. Management recognized the restructuring provision based on the criteria of IFRS as included in the Company's accounting memorandum. The analysis of Management of the restructuring agreements and restructuring plan is the basis for recognition. Due to the complexity of these restructuring activities we consider the recognition of the restructuring provision to be a key audit matter.



### Our response

Our audit procedures included inspecting the communication of initiatives in order to assess the timely recognition of restructuring provision, inspection of accounting memorandum and vouching key inputs, such as the early termination of contracts and employee termination benefits. In addition, we reviewed source documentation, such as underlying contracts, for contrary evidence and tested internal controls around the restructuring provision. Based on the procedures performed the restructuring provision has been appropriately recognized and disclosed in Note 6 of the financial statements.

## Report on the other information included in the annual report

In addition to the financial statements and our auditor's report thereon, the annual report contains other information that consists of:

- the Report of the Supervisory Board;
- the Management Report;
- the Corporate Governance Report;
- the Corporate Governance Statement; and
- the Responsibility Statement of the Management Board.

Based on the below procedures performed, we conclude that the other information:

- is consistent with the financial statements and does not contain material misstatements;
- contains the information as required by Part 9 of Book 2 of the Netherlands Civil Code.

We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Netherlands Civil Code and the Dutch Standard 720. The scope of the procedures performed is substantially less than the scope of those performed in our audit of the financial statements.

Management is responsible for the preparation of the other information, including the Management Report in accordance with Part 9 of Book 2 of the Netherlands Civil Code and other Information pursuant to Part 9 of Book 2 of the Netherlands Civil Code.

## **Report on other legal and regulatory requirements**

### **Engagement**

We were engaged by the Supervisory Board as auditor of QIAGEN N.V. on June 23, 2015, for year 2015 and have operated as statutory auditor since then.

## **Description of the responsibilities for the financial statements**

### **Responsibilities of Management and The Supervisory Board for the financial statements**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRS and with Part 9 of Book 2 of the Netherlands Civil Code. Furthermore, Management is responsible for such internal control as Management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to errors or fraud.

As part of the preparation of the financial statements, Management is responsible for assessing the company's ability to continue as a going concern. Based on the financial reporting framework mentioned, Management should prepare the financial statements using the going concern basis of accounting unless Management either intends to liquidate the company or to cease operations, or has no realistic alternative but to do so. Management should disclose events and circumstances that may cast significant doubt on the company's ability to continue as a going concern in the financial statements.

The Supervisory Board is responsible for overseeing the company's financial reporting process.

### **Our responsibilities for the audit of financial statements**

Our objective is to plan and perform the audit to obtain sufficient and appropriate audit evidence for our opinion. Our audit has been performed with a high, but not absolute, level of assurance, which means we may not have detected all material errors and fraud during the audit.

Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

For a further description of our responsibilities in respect of an audit of financial statements we refer to the website of the professional body for accountants in the Netherlands (NBA) [https://www.nba.nl/Documents/Tools%20Vaktechniek/Standaardpassages/Standaardpassage\\_nieuwe\\_controletekst\\_oob\\_variant\\_%20Engels.docx](https://www.nba.nl/Documents/Tools%20Vaktechniek/Standaardpassages/Standaardpassage_nieuwe_controletekst_oob_variant_%20Engels.docx)

Amstelveen, April 6, 2017

KPMG Accountants N.V.

M. Meester RA