

---

Financial Report

# 2015

GATCGATCGTAGCTGACTGACTGC  
GACCACGGACTACGTCATCTGACTAGCTGAATTATAGCGACGACATCGATCGTTCTGACTC  
TAGCTGAATTATAGCGACGACCTACAGACTTACGCATCGCGATCGCGACCACGGACTATGACTGC  
ATCTGACTAGCTGAATTATAGCGACGACATCGATCGTAGCTGACTGACTGC  
GGACTACGTCATCTGACTAGCTGAATTATAGCGACGACATCGATCGTCTGACTGACTGC  
GCGACGACGCGACCACGATCGTACTGACTGC  
GACTGACTGC

TCACTACTCAT  
AGTCACTACTCATCGGCTACAGAC  
CTCATCGGAGCGCGATCGACTACGTCATCTGACTAGC  
AGTCACTACTCATCGGCTACAGACTTACGCA

# Key Figures

## QIAGEN Key Figures

As of December 31

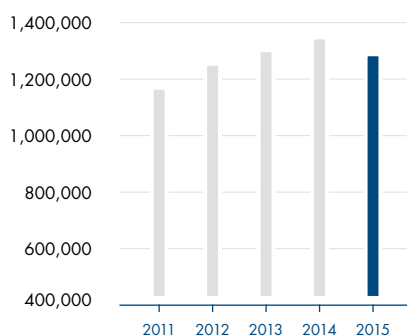
	2015	2014	2013	2012	2011
<b>\$ 1,000 except per share data</b>					
<b>Results</b>					
Net sales	1,280,986	1,344,777	1,301,984	1,254,456	1,169,747
Operating income	175,693	160,818	63,330	169,814	99,588
Net income*	127,103	116,634	69,073	129,506	96,038
Basic earnings per share (EPS)*	0.54	0.50	0.30	0.55	0.41
Diluted earnings per share (EPS)*	0.54	0.48	0.29	0.54	0.40
<b>Number of shares (in thousands)</b>					
Weighted average number of common shares used to compute basic net income per common share	233,483	232,644	234,000	235,582	233,850
Weighted average number of common shares used to compute diluted net income per common share	237,158	241,538	242,175	240,746	239,064
<b>Cash flow</b>					
Cash flow from operations	317,497	287,965	258,957	244,880	244,779
Capital expenditures for property, plant and equipment	97,778	86,591	84,468	101,996	86,805
Free cash flow (cash flow from operations less capital expenditures)	219,719	201,374	174,489	142,884	157,974
<b>Balance sheet</b>					
Total assets	4,189,678	4,454,372	4,088,392	4,087,631	3,729,685
Cash and cash equivalents	290,011	392,667	330,303	394,037	221,133
Total long-term liabilities, including current portion	1,360,293	1,496,991	1,032,409	1,101,550	725,874
Total equity	2,561,954	2,657,999	2,723,871	2,724,363	2,557,798

\* Attributable to the owners of QIAGEN N.V.

### Adjusted Net Sales

Adjusted net sales in 2014 and 2015 include deferred revenue contributions from certain bioinformatics acquisitions under purchase accounting rules.

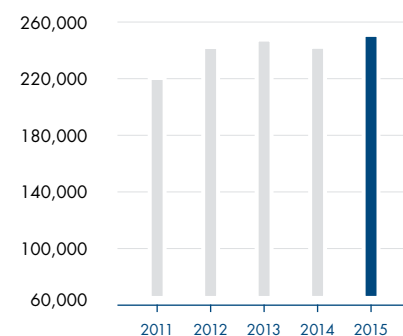
\$ 1,000



### Adjusted Net Income

Excluding acquisition, business integration, restructuring and related charges as well as amortization of acquired IP.

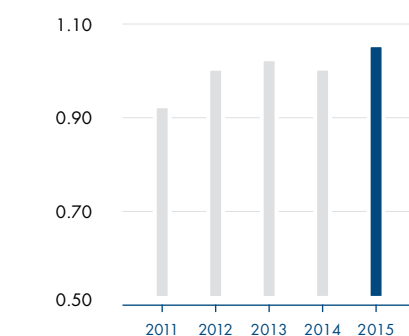
\$ 1,000



### Adjusted Diluted Earnings per Share

Excluding acquisition, business integration, restructuring and related charges as well as amortization of acquired IP.

\$ per share



As the innovative market and technology leader, QIAGEN creates Sample to Insight technologies that enable access to valuable molecular insights from any biological sample.

Our mission is to make improvements in life possible by enabling our customers to achieve outstanding success and breakthroughs in life sciences, applied testing, pharma and molecular diagnostics.

Our commitment to the markets, customers and patients we serve drives our innovation and leadership in all areas where our Sample to Insight technologies are required. The exceptional talent, skill and passion of our employees are key to QIAGEN's excellence, success and value.



DR. WERNER BRANDT  
Chairman of the Supervisory Board

## To our Shareholders

The members of the Supervisory Board wish to thank all QIAGEN employees and members of the Executive Committee for the progress made during 2015 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 2015 performance

The Supervisory Board monitored the conduct of QIAGEN's business on a regular basis during the year with the aid of detailed written and oral reports from the Managing Directors and members of the Executive Committee. Among the highlights for 2015 were improving trends among sales to Life Science customers, the continued expansion of the QuantIFERON-TB test as the modern gold standard for TB detection as well as QIAGEN strengthening its position as the leader in molecular oncology testing with the commercialization start of the GeneReader NGS System, which represents the first-ever complete solution for laboratories to gain insights needed to support cancer treatment decisions. The Supervisory Board believes QIAGEN is well-positioned to build further momentum in 2016 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

The composition and leadership of the Supervisory Board was consistent during the course of 2015, with a total of eight members in the Supervisory Board and two members of the Managing Board (Chief Executive Officer Peer M. Schatz and Chief Financial Officer Roland Sackers). As of December 31, 2015, however, Prof. Dr. James E. Bradner resigned as a member of the Supervisory Board following his appointment to become the new President of the Novartis Institutes for BioMedical Research at Novartis AG.

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.

---

During the course of 2016, the composition of the Supervisory Board is expected to change given my previously announced intention to step down with effect at the Annual General Meeting in June 2016 after having served on this Board since 2007. I would like to personally express my appreciation to my colleagues in the Supervisory Board and the Managing Board for their highest level of collaboration and professionalism during this time and their commitment to the success of QIAGEN. Following the Annual General Meeting, the Supervisory Board plans to elect Prof. Dr. Manfred Karobath, who has vast management, scientific and industry experience from various management positions in the pharmaceutical industry and who joined the Supervisory Board in 2000, as the new Chairman. Furthermore, the Nomination and Selection Committee has identified new candidates for the Supervisory Board, and they will be announced in due course following completion of the evaluation process. All other current members of the Supervisory Board will stand for re-election at this upcoming meeting.

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 2015 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.

The Supervisory Board met five times during 2015 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 to review performance and strategy as well as discuss compensation matters. We are pleased to report that all members of the Supervisory Board attended every Supervisory Board meeting in 2015, with the exception of one meeting where one Board Member was excused. 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 (Chairman Mr. Lawrence Rosen), a Compensation Committee (Chairman Prof. Dr. Manfred Karobath), a Selection and Appointment Committee (Chairman Dr. Werner Brandt), and a Science and Technology Committee (Chairman 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 2015 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 14, 2005. 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.

We believe all of our 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 2015 are presented as prepared by the Managing Board, audited by KPMG (Independent Registered 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 2015.

Venlo, the Netherlands, February 2016

The Supervisory Board:

A handwritten signature in blue ink that reads "Werner Brandt". The signature is written in a cursive style with a long, sweeping tail on the letter 't'.

Dr. Werner Brandt  
Chairman

# Content

## Overview

- 012 QIAGEN at a Glance
- 013 QIAGEN Around the World
- 014 The Executive Committee
- 016 Common Shares

## Management Report

- 024 Business and Operating Environment
- 053 Opportunities and Risks
- 073 Performance Review
- 084 Human Resources
- 088 Sustainability
- 091 Future Perspectives

## Corporate Governance

### Corporate Governance Report

- 096 Corporate Structure
- 097 Managing Board
- 099 Supervisory Board
- 108 Share Ownership
- 110 Additional Information

### Remuneration Report

- 116 Remuneration Policy
- 122 2015 Managing Board Remuneration
- 125 Future Development of the Remuneration Policy

## Financial Results

- 128 Consolidated Financial Statements
- 136 Notes to the Consolidated Financial Statements
- 196 Auditor's Report

## Service

- 202 QIAGEN Key Figures
- 204 Glossary
- 210 Service

This document contains detailed financial information about QIAGEN prepared under U.S. generally accepted accounting standards (U.S. GAAP) and included in our Form 20-F annual report filed with the U.S. Securities and Exchange Commission. QIAGEN also publishes an Annual Report under IFRS accounting standards, which is available on our website at [www.qiagen.com](http://www.qiagen.com).



# Overview

012 QIAGEN at a Glance

013 QIAGEN Around the World

014 The Executive Committee

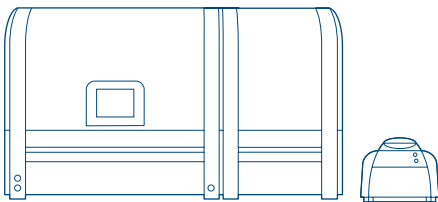
016 Common Shares

# QIAGEN at a Glance

## Product Categories

Percentage share of 2015 net sales

13%



**Instruments** are used with consumables, enabling customers to automate processes from the preparation of clinical samples to the delivery of valuable results.

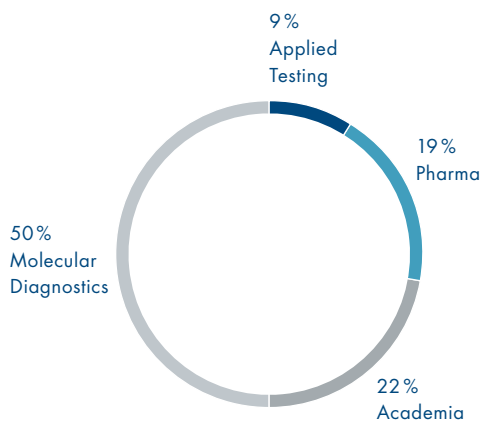
87%



**Consumables and related products** are specialized kits that contain all necessary materials to support the use of sample and/or assay technologies as well as bioinformatics solutions for analysis, interpretation and reporting of biological data.

## Customer Classes

Percentage share of 2015 net sales



### Molecular Diagnostics

Physicians, hospitals and healthcare providers use QIAGEN technologies to save lives and fight disease. Our products support disease prevention such as screening women for risk of cervical cancer; profiling patients to pinpoint many diseases; personalized healthcare to guide treatment decisions; and point-of-need testing to provide on-site diagnosis.

### Academia

Researchers at life science laboratories around the world depend on QIAGEN to advance our understanding of the molecular basis of life. Customers include universities and research institutes.

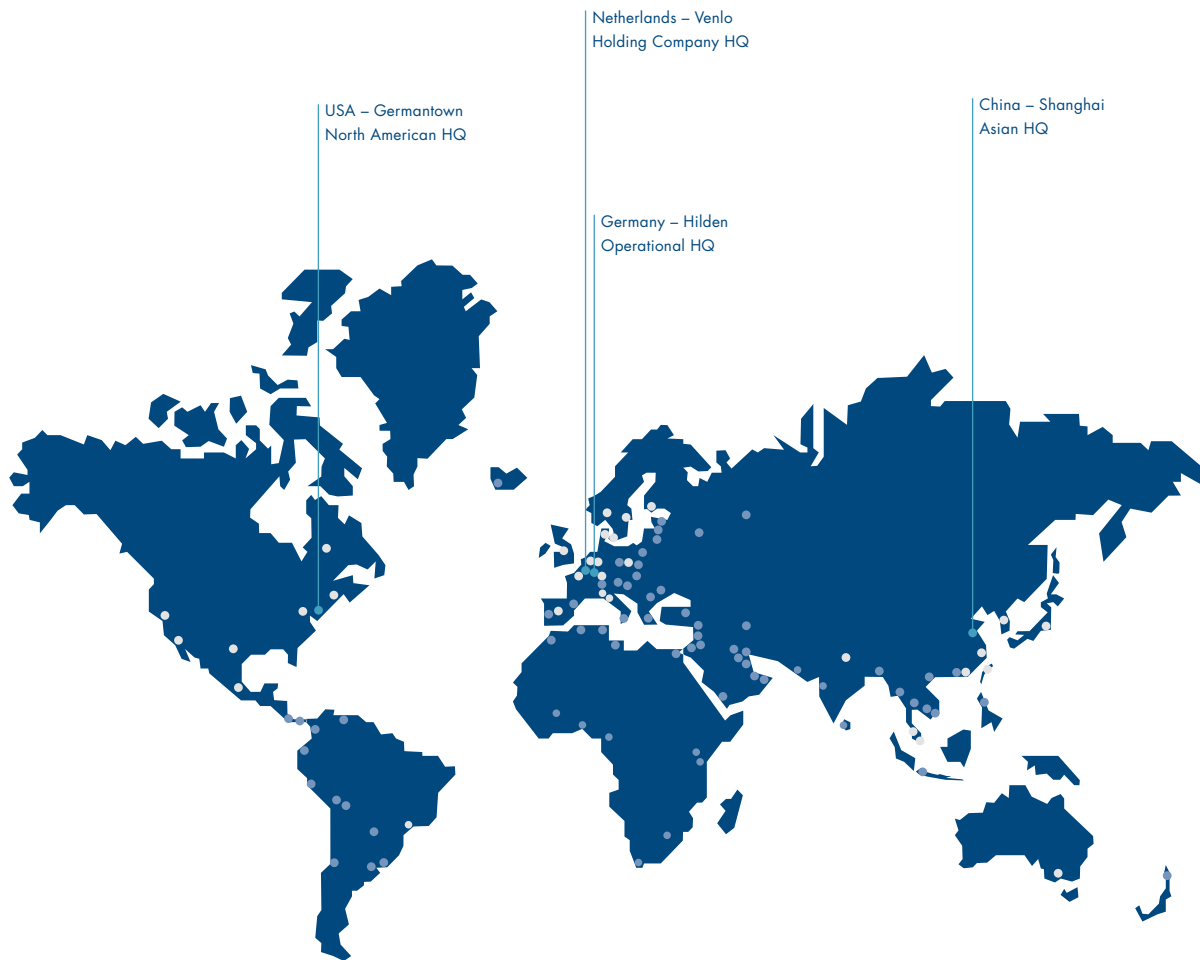
### Applied Testing

Professionals in fields such as human identification and forensics, food testing and veterinary medicine use QIAGEN technologies in commercial applications beyond human healthcare. Our products are helping to solve crimes, secure food supplies and detect potentially devastating livestock diseases.

### Pharma

Scientists in the pharmaceutical and biotechnology industries look to QIAGEN to advance gene-based drug discovery and development, supporting the creation of new medical breakthroughs.

# QIAGEN Around the World



● Headquarters   ● QIAGEN Companies   ● QIAGEN Distributors and Importers

For a full list of our subsidiaries and distributors, please visit [www.qiagen.com/contact/](http://www.qiagen.com/contact/)

---

# The Executive Committee



PEER M. SCHATZ  
Chief Executive Officer



THIERRY BERNARD  
Senior Vice President,  
Molecular Diagnostics Business Area



BRAD CRUTCHFIELD  
Senior Vice President,  
Life Sciences Business Area



DR. LAURA FURMANSKI  
Senior Vice President,  
Bioinformatics Business Area



DOUGLAS LIU  
Senior Vice President,  
Global Operations



MANUEL O. MÉNDEZ  
Senior Vice President,  
Global Commercial Operations



ROLAND SACKERS  
Chief Financial Officer



DR. THOMAS SCHWEINS  
Senior Vice President,  
Human Resources,  
Strategy & Marketing Services



**Peer M. Schatz** Joined QIAGEN in 1993, 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 at Sandoz AG and Computerland, 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 a board member of AdvaMedDx, a U.S. trade association that leads the effort to advance medical technology in order to achieve healthier lives and healthier economies around the world and ALDA (the Analytical, Life Science and Diagnostics Association), a trade association of developers and suppliers in these fields. He is also Chairman of the Board of Directors of QIAGEN Marseille S.A., a majority-owned subsidiary of QIAGEN.

**Thierry Bernard** Joined QIAGEN in February 2015 to lead QIAGEN's growing presence in Molecular Diagnostics, the application of Sample to Insight solutions for molecular testing in human healthcare. Mr. Bernard previously worked at bioMérieux, where he served in roles of increasing responsibility for 15 years, most recently as Corporate Vice President, Global Commercial Operations, Investor Relations and the Greater China Region. Prior to joining bioMérieux, he served in management roles in multiple international environments. Mr. Bernard is a member of the Boards of Directors of three privately held U.S. companies, First Light Biosciences, HepatoChem and more recently, Daktari Diagnostics, where he also served as CEO. He has earned degrees from Sciences Po (Paris), Harvard Business School, London School of Economics and the College of Europe and is a member of French Foreign Trade Advisors.

**Brad Crutchfield** Joined QIAGEN in June 2015 as Senior Vice President, Life Sciences Business Area, leading QIAGEN's presence in the Academia, Pharma and Applied Testing customer classes. Mr. Crutchfield has 30 years of experience in the industry, most recently as Vice President and General Manager EMEA for Illumina Inc. From 1985 to 2014, Mr. Crutchfield held positions of increasing responsibility with Bio-Rad Laboratories Inc., rising to Executive Vice President and President of The Life Science Group. He also has extensive experience in applied markets, particularly food safety. In 2013 and 2014 he also served as a Director of NanoString Technologies, Inc. He holds a Bachelor of Science in Physiology from the University of California at Davis.

**Dr. Laura Furmanski** Joined QIAGEN in June 2014 as Senior Vice President, Bioinformatics Business Area. Dr. Furmanski leads QIAGEN's rapidly growing presence in bioinformatics, a foundation of the strategy to address the rapidly growing needs of users in all customer classes to transform biological samples into valuable molecular insights. She was previously a partner with McKinsey & Company, where she served in McKinsey's Silicon Valley office and led a broad range of projects involving med-tech and life science companies. She has a distinguished track record of working with experts in advanced medical fields, delivering revenue growth through scalable business models and bringing unique insights across the healthcare value chain. Furthermore, Dr. Furmanski is a board member of two non-profit organizations, ACMG Foundation and ReSurge International. Dr. Furmanski received a B.A. in Psychology from Stanford University, as well as a Ph.D. and an M.A. in Psychology, Cognitive Neuroscience from the University of California, Los Angeles.

**Douglas Liu** Joined QIAGEN in 2005 as Vice President Global Operations. He heads Manufacturing, Supply Chain Management, Quality Assurance, Quality Control and Regulatory and Clinical Affairs at QIAGEN. Mr. Liu has 30 years of experience in the life sciences industry and previously worked at Bayer Healthcare, Chiron, Abbott Labs and Washington University. He has worked in the United States and Europe with leadership roles in R & D, Manufacturing, Strategic Planning and Program Management. Mr. Liu has an M.B.A. from Boston University and a B.S. from the University of Illinois, Urbana. He is active in supporting business development and is Chairman of BioHealth Innovation, Inc., a public private partnership focusing on developing the life science industry as well as being a member of the Maryland Governor's Life Science Board.

**Manuel O. Méndez** Joined QIAGEN in October 2014 as Senior Vice President, Global Commercial Operations, leading sales and marketing worldwide. Mr. Méndez has 25 years of experience in diagnostics and life sciences, most recently as Executive Vice President Americas for bioMérieux from 2010 – 2014. Previously he served in sales, marketing and general management roles with Abbott Laboratories, Thermo Fisher Scientific and OraSure Technologies – with leadership positions in the United States, Latin America, Europe and Asian markets. He is on the advisory board of 908 Devices, a maker of point-of-need chemical analyzers. Mr. Méndez received a B.S. in Biomedical Engineering from Boston University and an M.B.A. from Northwestern University Kellogg School of Management.

**Roland Sackers** Joined QIAGEN 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 in Business Administration (Diplom-Kaufmann) from the 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.

**Dr. Thomas Schweins** Joined QIAGEN in 2004 as Vice President Corporate Strategy and was appointed Vice President Marketing & Strategy in 2005. In late 2011, Dr. Schweins has assumed responsibility for Human Resources. Dr. Schweins came to QIAGEN from The Boston Consulting Group. He previously worked as Technology Manager, and later as an Assistant to the Management Board at Hoechst/Aventis. Dr. Schweins earned an M.Sc. degree in Biochemistry from the University of Hanover. He obtained his Ph.D. at the Max Planck Society and received an M.Sc. from the University of Southern California in Los Angeles, where he studied Business Administration and Chemistry.

---

# Common Shares

After a mixed performance in 2014, QIAGEN shares appreciated significantly in 2015 with double-digit gains in U.S. dollars and euros. We thank shareholders for their continued support of QIAGEN's strategic initiatives to accelerate innovation and growth by leveraging our "Sample to Insight" portfolio of differentiated products and services designed to help customers gain access to valuable molecular insights. Our senior executives and Investor Relations team are recognized for their proactive and transparent communications with the financial community.

## Market Environment

Stock markets delivered mixed results in 2015, a year of uneven macro-economic developments across industrialized countries and key emerging markets. Ongoing events such as declining oil and other commodity prices, shifting currency exchange rates and monetary policies, and concerns about China and energy-producing countries, influenced equity markets. At the same time, moderate global economic growth continued in 2015 amid generally low interest rates and accommodative policies.

As benchmarks, the S&P 500 index in the United States was virtually unchanged at year-end 2015, while Germany's DAX index of the country's 30 largest companies advanced nearly 10% from a year earlier. The TecDAX in Germany, of which QIAGEN is a member, rose 34% for the year, with this performance influenced by several acquisitions.

The molecular diagnostics and life sciences tools segment was restrained by modest economic growth in 2015 but benefited from improving sentiment in the research and healthcare end markets. While better government funding trends in the U.S. and Europe strengthened demand in academic research, pharmaceutical mergers and restructuring activity dampened industry R&D investment. Applied testing continued to grow, especially in human identification and forensics. Healthcare faced mixed influences, driven by demand for innovative new diagnostic technologies in fields such as infectious diseases and personalized medicine, but constrained by slow economic growth and reimbursement issues. QIAGEN delivered growth in adjusted net sales at constant exchange rates in 2015, though adverse currency movements led to lower reported sales. Adjusted earnings improved in-line with our adjusted net sales growth. QIAGEN made significant progress on strategic

initiatives to drive innovation and growth focusing on a portfolio of growth drivers, which led the solid underlying performance across all customer classes delivering double-digit CER growth and one-third of sales in 2015. QIAGEN continues to invest in these growth drivers, reallocating resources with the goals of accelerating sales and improving profitability while also enhancing shareholder value and maintaining financial flexibility.

## Listings in the U.S. and Europe

QIAGEN's common shares have been registered and traded in the United States since 1996 on the NASDAQ Global Select Market (NASDAQ National Market prior to July 2006) and in Germany since 1997 on the Frankfurt Stock Exchange (and the Prime Standard segment since its launch in 2003). Dual listing on NASDAQ and the Frankfurt Stock Exchange offers advantages for QIAGEN, our shareholders and employees since dual listing increases the potential market opportunity and increases liquidity for our shares. Unlike American Depositary Receipts (ADRs), QIAGEN's shares provide equal corporate rights for all shareholders and can be traded on either exchange, in U.S. dollars or euros.

## Share Price and Liquidity

QIAGEN's common share price gained substantially in 2015, with shares in euros rising approx. 30% to €25.12 on the Frankfurt Stock Exchange and climbing approx. 18% to \$27.65 on NASDAQ. Our common shares continued to offer high liquidity during 2015, with an average daily trading volume of approximately 1.3 million shares (0.9 million on NASDAQ and other U.S. trading venues, and 0.4 million on the Frankfurt Stock Exchange (XETRA) and other German exchanges). QIAGEN continued its commitment to disciplined capital allocation, having repurchased a total of \$20.8 million in shares (or approximately 0.8 million shares) during 2015 as part of the third \$100 million repurchase program, which was authorized by shareholders. As of December 31, 2015, the free float, which affects weighting of QIAGEN shares in various indexes, remained at 94%.

### [1] United States

Market	NASDAQ
Segment	NASDAQ Global Select Market
Ticker	QGEN
ISIN	NL0000240000

### [2] Germany

Market	Frankfurt Stock Exchange
Segment	Prime Standard
Ticker	QIA
WKN	901626

### [3] Capitalization Dec. 31, 2015

Market capitalization	\$6.44 billion
Shares outstanding (in thousands)	233,066
Free float	94%

## Index Membership

QIAGEN is one of the largest and most prominent constituents of Germany's TecDAX, a stock index that tracks the 30 largest German companies from the technology sector not included in the benchmark DAX index. As of December 31, 2015, QIAGEN was among the top three companies in the TecDAX based on market capitalization. QIAGEN is also a member of the U.S. large-cap Russell 1000 index and the broad market Russell 3000 index, which measures performance of the 3,000 largest companies in the U.S. The Russell 1000 index is a subset of the Russell 3000 index and includes 1,000 of the largest securities based on a combination of their market capitalization and current index membership. Furthermore, QIAGEN shares are included in other U.S. and European stock market indexes.

---

## Shareholder Structure

QIAGEN has a truly global investor base comprised of more than 335 identified institutional investors distributed around the world, including approximately half in North America, a further one-third in Europe and the remaining shares in the Asia-Pacific/Japan region. Members of the Managing Board and the Supervisory Board in total held approximately 2.5% of QIAGEN's outstanding common shares at the end of 2015.

## Annual Shareholders' Meeting

At the 2015 Annual Shareholders' Meeting, shareholders voted in favor of all resolutions proposed by the Board of Directors, in many cases with majorities above 95% of shares present at the meeting. Shareholders present or represented at the meeting held on June 23, 2015, in Venlo, the Netherlands, held approximately 154.1 million shares, or 64% of the approximately 239.7 million issued shares of QIAGEN as of the record date for the meeting. Details of attendance and voting results from our Annual Shareholders' Meeting are available at [www.qiagen.com](http://www.qiagen.com).

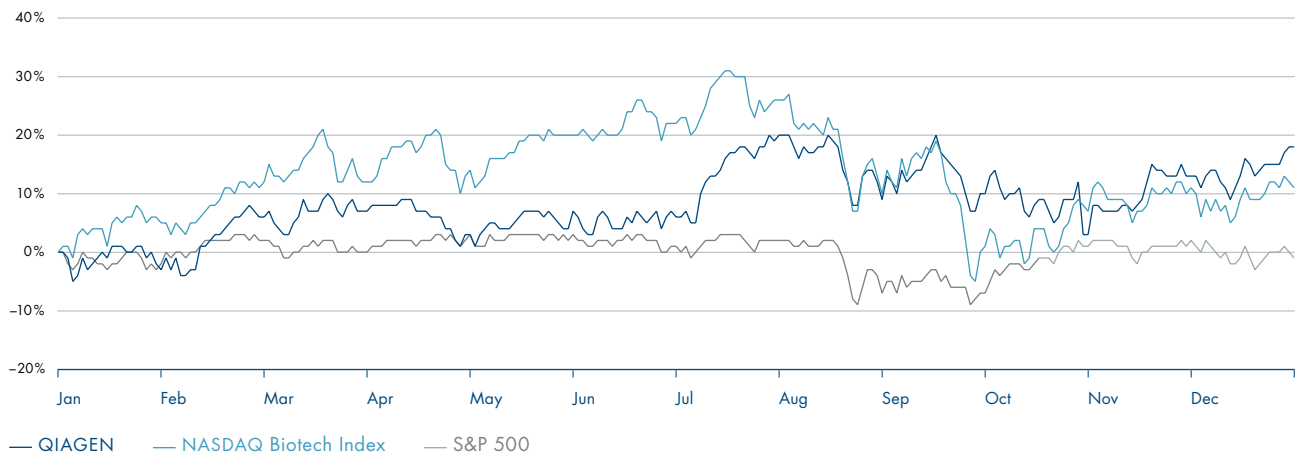
## Investor Relations and Engagement with Shareholders

QIAGEN is committed to offering shareholders, analysts and communities around the world transparent, comprehensive and readily accessible information on our vision, mission and strategy, as well as performance and future prospects. The relationship with existing and potential investors continued at an intensive pace in 2015, with hundreds of individual discussions held during many roadshows and investor conferences around the world. Many investors and analysts made use during 2015 of the opportunity to inform themselves about QIAGEN in personal meetings at our sites in Hilden, Germany; Germantown, Maryland; Redwood City, California; Singapore; and Shanghai, China.

Personal contact with private investors is an important element of our investor relations strategy. Apart from the Annual General Meeting, QIAGEN invited investors in September 2015 for the fourth annual Private Investor Day to its headquarters in Hilden, Germany. About 30 people attended the event, which included presentations on QIAGEN's global activities along with tours of the production and R&D areas, and offered shareholders an opportunity to gain more profound insights into QIAGEN.

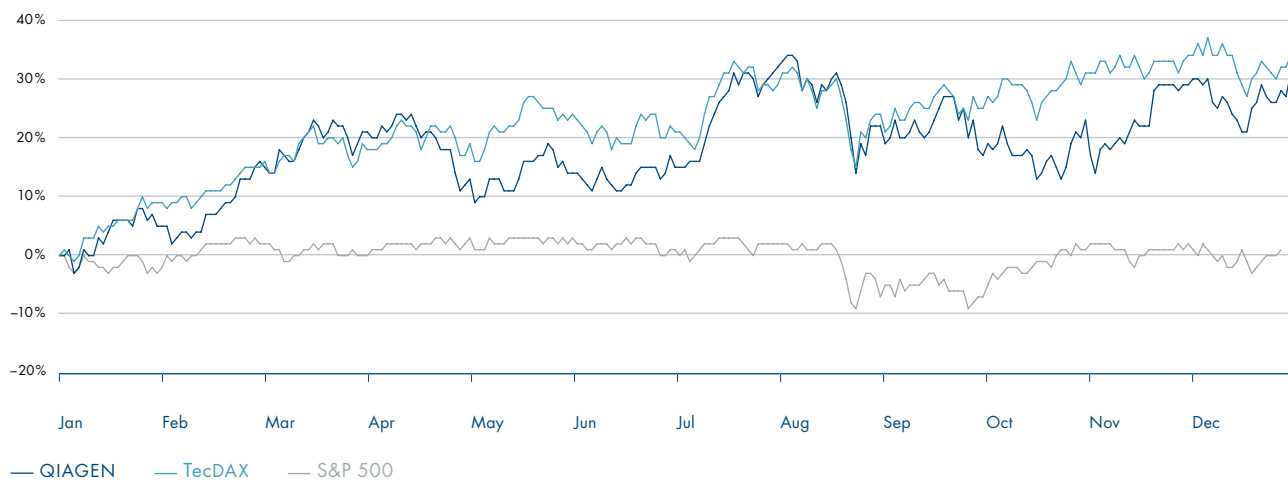
Approximately 31 analysts from international brokerages followed QIAGEN in 2015, with analysts based in the United States, France, Germany and the United Kingdom. In 2015, these efforts to address the needs of the financial community were repeatedly recognized by DIRK (the association for Investor Relations in Germany) and Extel as QIAGEN ranked among the top companies and IR professionals among all TecDAX companies as well as companies in the European industry sector.

[4] QIAGEN Share Price Development and Average Trading Volume – NASDAQ 2015



	2015	2014
Year-end price	\$ 27.65	\$ 23.46
High	\$ 28.53	\$ 25.32
Low	\$ 22.11	\$ 19.46
Average daily trading volume (in million shares)	0.9	0.9

[5] QIAGEN Share Price Development and Average Trading Volume – Frankfurt Stock Exchange (XETRA) 2015



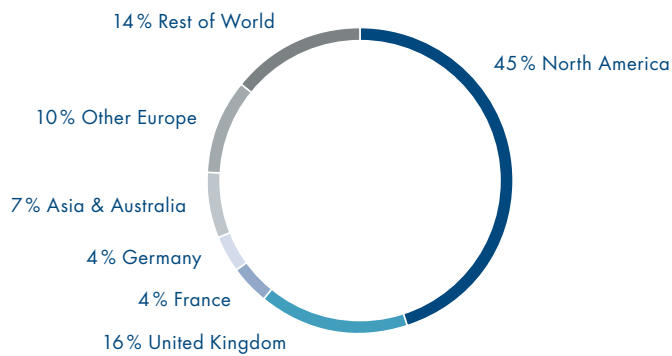
	2015	2014
Year-end price	€25.12	€19.36
High	€26.05	€19.64
Low	€18.72	€14.38
Average daily trading volume (in million shares)	0.4	0.4

[6] Key Share Data

As of December 31, 2015

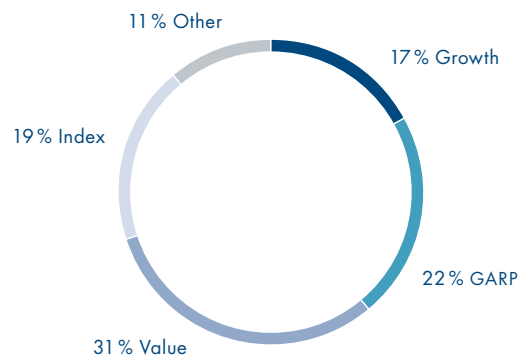
	2015	2014
Total equity (in \$ thousands)	2,561,954	2,657,999
Issued shares (in thousands)	239,707	239,707
Outstanding shares at December 31 (in thousands)	233,006	232,023
Weighted-average number of common shares outstanding – basic (in thousands)	233,483	232,644
Weighted-average number of common shares outstanding – diluted (in thousands)	237,158	241,538
Year-end market capitalization (in \$ million)	6,443	5,403
Year-end market capitalization (in € million)	5,852	4,449

[7] 2015 Shareholder Structure by Geography



~91% of total capital identified  
Source: QIAGEN shareholder ID

[8] 2015 Shareholder Structure by Investor Type



~91% of total capital identified  
Source: QIAGEN shareholder ID





# Management Report

024 Business and Operating Environment

053 Opportunities and Risks

073 Performance Review

084 Human Resources

088 Sustainability

091 Future Perspectives

---

# Management Report

## Business and Operating Environment

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 Sample to Insight solutions.

Sample to Insight solutions are composed of 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. More than two billion biological samples have been prepared or analyzed using QIAGEN sample technologies. Our proven solutions are providing answers in hospitals and laboratories worldwide, integrated with bioinformatics to make sense of the increasing volumes and complexity of data.

Since the first sequencing of the human genome was completed in 2003, an explosion in genomic discoveries has launched what observers are calling “the Century of Biology.” Dramatic acceleration in the speed of sequencing – and reduction in cost – is generating vast quantities of genomic data and new discoveries in biology. This growing knowledge of the molecular basis of life, its mechanisms and diseases, is driving a revolution in research and influencing many areas of everyday life. QIAGEN’s mission is to drive this era of

discoveries and the wide-ranging practical applications they are spawning for the future.

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 visible for analysis, such as identifying the DNA of a virus or a gene mutation in a tumor. QIAGEN’s industry-leading bioinformatics solutions interpret data to provide relevant, actionable insights. Our automation platforms tie these together in seamless and cost-effective molecular testing workflows – from Sample to Insight.

Net sales of \$ 1.28 billion in 2015 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 2015 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.

## Operating Environment in 2015

### Economic Environment

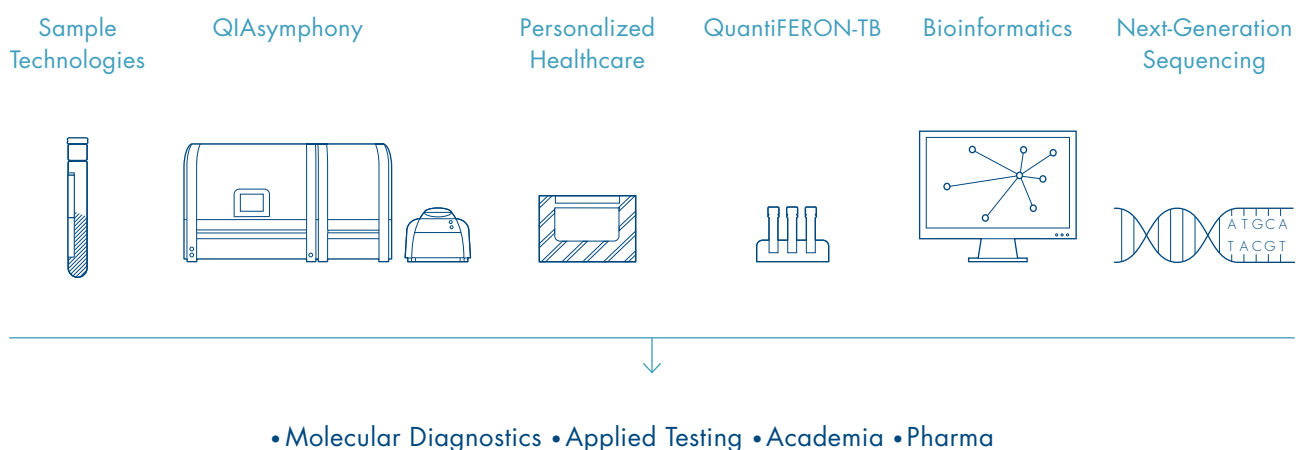
Modest global economic growth in 2015 and diverging regional trends provided various opportunities and challenges in terms of the business environment QIAGEN faced during the year and impacted demand for our products. Real Gross Domestic Product (GDP) for the world grew approximately 2.4% in 2015, slower than the 2.6% growth in 2014 and about the same as 2.4% in 2013, according to World Bank estimates. Economic growth improved in the United States, the Euro zone area and Japan in 2015, but slowed in China and was generally weaker in other top emerging markets. Macroeconomic factors included declining prices for oil and other commodities, changing monetary policies, adverse currency exchange trends against the U.S. dollar (QIAGEN's

reporting currency), and concerns about the general health of the top emerging markets, including Russia and Brazil.

### Industry Environment

Molecular diagnostics in healthcare and genomic testing in the life sciences are disseminating around the world, and this secular growth trend continued in 2015 amid mixed influences in the economy and specific market segments. Technologies such as polymerase chain reaction (PCR) and next-generation sequencing (NGS) are producing a wave of discoveries and new applications in medicine and other fields. As genomic knowledge expands and new technologies make unlocking valuable insights more efficient, molecular testing is used increasingly in clinical diagnostics, academic research, pharmaceutical R&D and other applications. New capabilities, in turn, lead to growth in sales of instruments, reagents and other consumables, and bioinformatics solutions. In 2015, the Molecular Diagnostics market faced mixed influences, with growth in demand driven by innovative new technologies such as NGS and new tests for infectious diseases and personalized medicine, but constrained by healthcare funding issues and slow economic growth. In Academia, fiscal pressures continue to restrict government funding, although improving trends in 2015 strengthened demand in the U.S. and Europe. The Pharma industry relies increasingly on advanced molecular technologies to guide drug discovery and development, although R&D spending is constrained by ongoing consolidation and restructuring. Applied Testing continues to grow, led by human identification and forensics. The ongoing movement of genomic technologies from basic research into mainstream clinical and industry applications is driving long-term growth, while adding regulatory and reimbursement challenges to economic influences.

## [1] Growth Drivers and Key Catalysts



### Recent Developments

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

#### Leadership in sample technologies continuing to drive growth:

- Building on our long-standing core strength in sample technologies, which labs around the world rely on to obtain highest-quality DNA and RNA for downstream analysis, we further expanded our offering in 2015 to maximize the value of our portfolio by addressing additional front-end issues for customers. QIAGEN is pioneering “liquid biopsies” to unlock valuable molecular insights from body fluids such as blood rather than surgical biopsies. We also continue to add cutting-edge technologies to address particularly difficult sample challenges in life science research.
- In 2015 we expanded our pipeline by acquiring the innovative AdnaGen technology, which enables enrichment and molecular analysis of circulating tumor cells (CTCs) from blood samples. CTCs are pivotal to understanding the biology of cancer, and they hold promise to help guide treatment decisions, evaluate disease burden and monitor tumor progression.
- We also partnered with Cell Microsystems for exclusive rights to commercialize the CellRaft Array technology, considered the most cost-efficient, viable technology for isolation and analysis of single cells, a rapidly emerging area of research. The addition complements QIAGEN’s existing single-cell portfolio that includes the REPLI-g product line.
- In late 2015 we acquired MO BIO Laboratories, a leader in technologies to analyze the impact of microbial diversity. Studies of the microbiome and metagenomics, enabled by

next-generating sequencing, are increasingly important because of the impact microorganisms exert on human health and the environment. MO BIO's proprietary technology for isolating nucleic acids from challenging samples such as soil, water, plants, skin and feces addresses a critical need for laboratories. QIAGEN has launched a range of new products for microbiome analysis, from sample technologies to bioinformatics.

#### QuantiferON-TB Gold growing briskly as world focuses on tuberculosis control:

- The QuantiferON-TB Gold (QFT) and QuantiferON-TB Gold Plus (QFT-Plus) tests for latent tuberculosis infection again delivered rapid growth in 2015. Our novel QuantiferON-TB technology has become the latent TB test of choice with high market shares around the world – and about 80% market share in Europe. Our modern QuantiferON-TB technology is displacing the century-old tuberculin skin test (TST) in screening for TB infection.
- Active tuberculosis (TB), a severe infectious disease that can be fatal if untreated, often results from "reactivation" of latent TB, an asymptomatic phase of the infection that can lie dormant for years. TB control programs are increasingly screening vulnerable subpopulations and treating those infected with latent TB to prevent the emergence of the active, contagious disease. Using a small blood sample, QFT or QFT-Plus are more reliable than skin tests in detecting latent TB.
- In February 2015, groundbreaking clinical data on QuantiferON-TB Gold was published in *The Lancet*. Testing more than 21,000 people in China, the study demonstrated that QFT provided more accurate diagnosis than the tuberculin skin test. The authors recommended community-based screening of at-risk populations with a modern blood test such as QFT.
- QuantiferON-TB Gold Plus, the fourth generation of our market-leading test, gained momentum in 2015 after receiving CE-IVD clearance in late 2014 for sale in 30 European countries. U.S. development and regulatory efforts are ongoing.

- Adoption of the QuantiferON technology continues to spread. The National Health System (NHS) in England selected QFT-Plus for use in laboratory testing tenders as part of its TB control initiatives. In Germany, authorities recommended modern blood tests such as QFT and QFT-Plus after a large influx of Middle Eastern refugees, one of the vulnerable subpopulations in need of TB screening, depleted supplies of the only approved source of tuberculin skin tests. The U.S. Occupational Safety and Health Administration cited QFT in a directive on TB testing of healthcare workers.
- QuantiferON Monitor (QFM) was launched in Europe in 2015 for initial use in transplant patients as a standardized, cost-effective measurement of immune system response.

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

- In late 2015 we introduced the GeneReader NGS System, the first complete Sample to Insight next-generation sequencing (NGS) solution designed for any laboratory to deliver actionable results. The platform 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 clinical testing to take advantage of NGS technology and improve outcomes.
- The GeneReader NGS System has gained positive customer feedback. At its rollout during the Association for Molecular Pathology (AMP) 2015 Annual Meeting, the Broad Institute of MIT and Harvard presented an analysis demonstrating the accuracy of the platform through a head-to-head comparison with other molecular testing systems.
- With the GeneReader NGS System we introduced our new Actionable Insights Tumor Panel, the first in a family of GeneRead QIAact Panels. The novel gene panel targets 12 clinically actionable genes that are often analyzed in prevalent types of cancer, including breast, ovarian, colorectal, lung and melanoma. The panel can detect up to 1,250 different genetic mutations in a sample. The panel is integrated with QIAGEN Clinical Insight software to access the latest data

on relevant variants using the QIAGEN Knowledge Base, the industry's largest collection of human-curated genomic findings and literature.

- We integrated the Enzymatics technology and consumables portfolio, which we acquired in December 2014, into our offering of universal NGS products. Enzymatics products are used in an estimated 80% of all next-generation sequencing workflows.

#### Leadership in Personalized Healthcare gaining further momentum:

- QIAGEN continues to roll out novel companion diagnostics that deliver insights enabling personalized treatment decisions based on patients' individual genomic information. Our Personalized Healthcare pipeline is gaining momentum through new collaborations with Pharma companies, expanding platform options and the licensing of novel biomarkers.
- The *therascreen*<sup>®</sup> EGFR RGQ PCR Kit received U.S. regulatory approval in 2015 to guide the use of AstraZeneca's IRESSA<sup>®</sup> (gefitinib) in patients with advanced or metastatic non-small cell lung cancer (NSCLC). A U.S. regulatory submission also was completed for this kit, to guide the use of Clovis Oncology's proposed targeted therapy rociletinib, for the treatment of patients with NSCLC harboring a T790M mutation in the EGFR gene.
- In 2015 QIAGEN's *therascreen* EGFR RGQ Plasma PCR kit received CE-IVD marking as the first-ever liquid biopsy-based companion diagnostic to gain regulatory clearance for use in lung cancer patients. We have other co-development efforts underway to commercialize companion diagnostics based on non-invasive liquid biopsies.
- QIAGEN and Biotype Diagnostics GmbH entered into a partnership to develop and commercialize molecular diagnostic workflows, especially for companion diagnostics, based on QIAGEN's Modaplex platform. The system enables

customers to detect, characterize and measure up to 100 parameters simultaneously.

- An agreement with Columbia University provided exclusive rights for diagnostics based on fusions of the fibroblast growth factor receptor (FGFR) and transforming acidic coiled-coil (TACC) genes in various cancers. The program is synergistic with our pipeline, including development of companion diagnostics based on the IDH1 and IDH2 biomarkers.

#### Collaborations with Pharma expanding to drive growth in Personalized Healthcare:

- 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. In 2015 we initiated a record number of co-development projects with existing and new partners and reached a milestone of 15 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.
- In 2015, we launched collaborations for co-development of tests based on several cancer-related biomarkers including IDH1/2, FGFR, BRCA, BRAF and PI3K, using a range of different detection technologies including PCR, Modaplex, QuantiFERON and next-generation sequencing (NGS).
- Most of these collaborations are undisclosed at the request of the Pharma partners. One recently announced program will commercialize a non-invasive companion diagnostic for a novel Tokai Pharmaceuticals drug compound that is in late-stage trials for treatment of castration-resistant prostate cancer, using our new AdnaGen circulating tumor cell technology. Another new partnership begins with development of a companion diagnostic paired with a targeted compound from Array BioPharma that is currently in Phase III clinical trials for use in patients with NRAS-mutant melanoma.

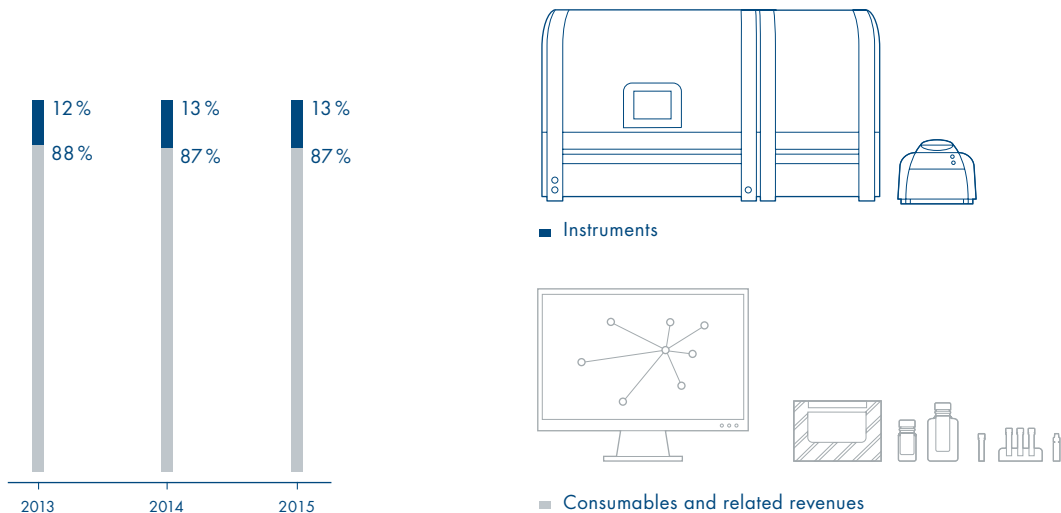
### QIASymphony delivering platform growth as content menu expands:

- QIAGEN achieved our 2015 goal of surpassing 1,500 cumulative placements of the flexible modular QIASymphony platform, up from 1,250 at the end of 2014. The flexible QIASymphony platform offers customers Sample to Insight automation for medium-throughput molecular testing workflows. The larger installed base and expanding content menus drove our 2015 growth in consumables.
- We continue to expand the QIASymphony content menu to enhance the instruments' value to customers worldwide. In 2015, we launched seven new diagnostic tests with European approval to run on the Rotor-Gene Q (RGQ) real-time PCR platform, in the QIASymphony family. The first multiplex assay for the platform, the RespiFast RG Panel, launched with CE-IVD marking for detection and differentiation of 18 viruses and four bacteria in acute upper respiratory tract infections.
- We are advancing a pipeline of more than 30 development projects for QIASymphony, including the growing menu of infectious disease tests in the *artus* portfolio in Europe and the U.S. We are also expanding our Applied Testing content: investigator tests for human ID/forensics, cadaver for veterinary medicine and mericon for food safety. In veterinary labs, a mericon test was deployed to help combat the global spread of an H5N8 strain of avian influenza A among poultry.
- We entered a collaboration with Seegene Inc. to develop a menu of multiplex assay panels for the QIASymphony platform, using Seegene technologies that enable real-time PCR analysis of up to 20 target genes per tube in a single reaction. The first project is to develop comprehensive panels to profile infectious diseases.
- 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 Bioinformatics portfolio delivered strong double-digit growth in 2015, enabling users to gain valuable insights from sequencing data with the industry-leading portfolio of information resources and software solutions. Our tools 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.
- The global introduction of QIAGEN Clinical Insight (QCI) in 2015 added momentum with a unique evidence-based clinical decision support solution that streamlines the annotation, interpretation and reporting of NGS results for clinical laboratories. QCI is a software and content platform that draws insights on complex genomic variants from the QIAGEN Knowledge Base. Applications of QCI expanded as 2015 progressed, from interpreting NGS data on somatic mutations in solid tumor cancers, to hereditary cancer indications, as well as leukemia and lymphoma testing.
- Our bioinformatics solutions gained broader commercial presence through reseller agreements with BGI, the world's largest genomics organization, and GATC Biotech, a leading provider of DNA and RNA sequencing services worldwide, by providing their clients access to our Ingenuity Variant Analysis solution. This powerful analysis and interpretation platform enables customers to efficiently evaluate complex genomic data in a secure, cloud-based environment.
- We co-founded a coalition of 13 leading life science and diagnostics organizations to create and launch the Allele Frequency Community, an extensive, high-quality collection of digitized human genomes. The data is stored on QIAGEN's secure IT infrastructure, and researchers can explore it using Ingenuity Variant Analysis.

[2] Net Sales by Product Categories



- QIAGEN became the exclusive partner to commercialize a new database containing more than 7,000 highly annotated whole genomes from Inova Genomes. Providing researchers with a unique, diverse compendium of sequences, this database is available through Ingenuity Variant Analysis and the CLC Biomedical Genomics Workbench.
- The CLC Microbial Genomics Module was launched to enable academic and commercial researchers focused on food production, agricultural biology and infectious diseases to visually explore and analyze microbiomes.
- We introduced a new hereditary disease solution to accelerate solve rates in diagnostic odyssey cases by enabling researchers to focus on the right causal candidates. The offering includes QIAGEN’s Biomedical Genomics Workbench, Biomedical Genomics Server Solution, Ingenuity Variant Analysis and HGMD Human Gene Mutation Database.

## Products

QIAGEN leverages our leadership in Sample to Insight molecular technologies across a wide range of applications and customer classes through more than 500 core consumable products (sample and assay “kits”), as well as instruments that automate the use of these products for sample preparation, analysis and interpretation. 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. [2]

### *Consumables and related revenues*

Consumable products, accounting for approximately 79%–83% of net sales, typically include sample technologies



that contain tools and ingredients 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 buffers and a manual of protocols and background information.

Reliability, standardization, ease of use and cost-effectiveness are key to the success of commercial products in molecular testing laboratories. QIAGEN sample technologies ensure that a biological sample is processed in a highly reproducible, standardized method with the highest level of quality to allow accurate analysis. Our assay technologies are either generic or pre-designed, with each kit including reagents to enable customers to target molecules of interest for detection on platforms such as polymerase chain reaction (PCR) or next-generation sequencing (NGS). Each kit is sufficient to support a number of applications, varying from kits containing a single application to kits containing more than 1,000 applications per kit.

Our sample technologies are used to isolate, purify and stabilize nucleic acids and proteins. Applications include plasmid DNA purification, RNA purification and stabilization, genomic and viral nucleic acid purification, DNA cleanup after PCR and sequencing, and library preparation for sequencing. We are the leader in sample technology kits to enable minimally-invasive liquid biopsies based on blood or other body fluids. Our assay technologies enable detection of specific or open molecular targets. Applications include open, general purpose PCR reagents or kits for the specific detection of viral or bacterial pathogens and parasites in humans and animals, pharmacogenomic testing and genotyping, as well as a growing portfolio of gene panels enabling next-generation sequencing to identify genetic mutations relevant to clinical or research targets in diseases such as cancer.

Related revenues, accounting for approximately 4%–8% of our net sales, include bioinformatics solutions, including the Ingenuity, CLC bio and BIOBASE portfolios acquired in 2013 and 2014. QIAGEN bioinformatics are sold as freestanding

solutions and also, increasingly, integrated with QIAGEN consumables and instruments for seamless Sample to Insight workflows. Examples of our bioinformatics solutions:

The [QIAGEN Knowledge Base](#) is a deep repository of expertly curated biological interactions and functional annotations covering millions of relationships between proteins, genes, complexes, cells, tissues, drugs and diseases. This resource, which is updated continually, provides powerful content and context for a number of our bioinformatics solutions.

[Ingenuity Variant Analysis](#) provides a powerful cloud-based platform to efficiently evaluate data generated by high-throughput NGS technologies. Tapping into the QIAGEN Knowledge Base, it quickly filters genetic variants from testing to identify those most likely to cause disease.

[QIAGEN Clinical Insight](#) is a unique evidence-based clinical decision support solution which was introduced in 2015. This software and content platform, drawing on the QIAGEN Knowledge Base, delivers clinically relevant insights from complex genomic variants identified in NGS. Applications involve tests for somatic and hereditary cancer, leukemia and lymphoma.

[CLC Genomics Workbench](#) is a comprehensive analysis package for the analysis and visualization of data from all major NGS platforms. The software incorporates cutting-edge technology and algorithms, supporting key NGS features within genomics, transcriptomics and epigenomics research fields.

[GeneGlobe](#), our web-based portal that enables researchers to search and select from more than 31 million pre-designed and custom PCR assay kits and NGS assay panels, includes genome-wide solutions for 28 species with any gene or pathway of interest.

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, all the way to 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.

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. In 2015, our installed base increased to more than 1,500 QIAsymphony systems worldwide, more than triple the number at the end of 2010. 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.

**Rotor-Gene Q**, the world's first rotary real-time PCR cycler system, uses real-time PCR reactions to make sequences of

DNA and RNA visible through amplification and quantifiable. It is an integral component of QIAsymphony RGQ.

**GeneReader NGS System**, introduced in 2015, is the first complete Sample to Insight next-generation sequencing (NGS) solution designed for any laboratory to deliver actionable results. This innovative platform provides a simpler, more cost-effective way for clinical testing to take advantage of NGS technology and improve outcomes. The GeneReader NGS System 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. All parts of the NGS workflow, from handling of primary samples through sequencing to final reports, are provided by QIAGEN's Sample to Insight system.

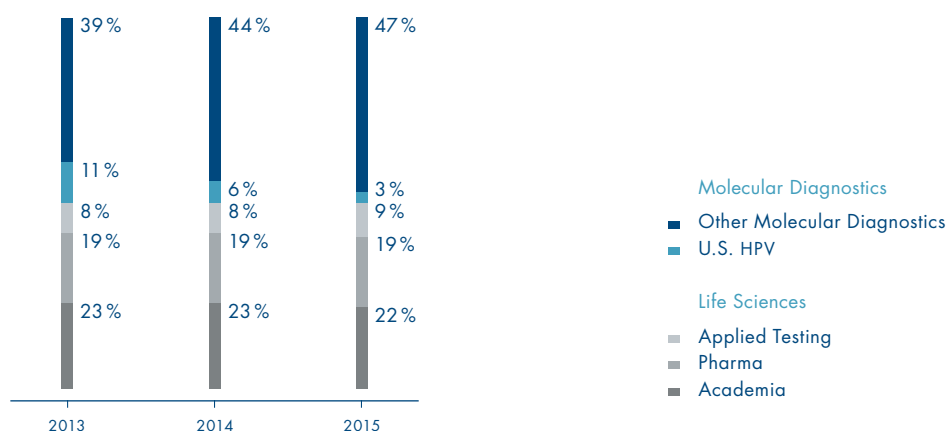
**Modaplex** is a multimodal automation system integrating amplification, capillary electrophoresis and real-time qPCR quantification of multiple targets in a single reaction. This innovative platform allows up to 48 samples, including multiple targets and different types of assays, to run simultaneously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

**EZ1 Advanced XL** performs automated nucleic acid purification for a wide range of sample types relevant for molecular diagnostics, human identity testing, forensics, biomedical research, and gene expression analysis.

**QIACube** is an award-winning sample processing instrument that incorporates novel and proprietary technologies allowing users to fully automate the use of almost all QIAGEN technologies originally designed for manual processing of samples.

**QIACube HT** enables automated mid- to high-throughput nucleic acid purification in 96-well format using silica membrane technology. Users can quickly and easily purify DNA, RNA, and miRNA from almost any type of sample – including cells, tissues, and food material, as well as from bacteria and viruses in animal samples.

[3] Net Sales by Customer Classes



**PyroMark** is a high-resolution detection platform with Pyro-sequencing technology that enables real-time analysis and quantification of genetic mutations and DNA methylation patterns. This technology can be of great value, as it allows users to identify previously unknown mutations or 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. The unmatched versatility of the QIAgility means that almost all tube and plate formats are supported, as well as Rotor-Discs for the Rotor-Gene Q.

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

**ESEQuant instruments** enable Point of Need testing in healthcare and other applications. These portable, battery-operated optical measurement devices permit low-throughput molecular testing in physician practices, emergency rooms, remote areas, and other settings with limited or delayed access to laboratory infrastructure.

## 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: [3]

- **Molecular Diagnostics** – healthcare providers engaged in patient care including Prevention, Profiling of diseases, Personalized Healthcare and Point of Need testing
- **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 (NGS) is in the early days of further transforming healthcare.

Technologies for molecular diagnostics enable clinicians and labs to identify and profile microorganisms, cancer cells, bacteria and viruses by searching for their specific nucleic acid sequences or to characterize 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 \$5–6 billion in 2015, of which approximately \$4 billion is potentially accessible to QIAGEN's current product portfolio. Molecular diagnostics is the most dynamic segment of the global *in vitro* diagnostics market and is expanding at a compound annual growth 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.

QIAGEN's growth among Molecular Diagnostics customers results from targeting four strategies for fighting disease:

- **Prevention** – using advanced technologies to screen non-symptomatic patients as a preventive strategy, such as testing women for HPV to protect from cervical cancer or screening patients for latent TB infection to guard against active TB disease.
- **Profiling** – testing symptomatic patients to profile the precise type of disease, for example screening to differentiate viral or bacterial infections involved in blood-borne diseases and healthcare-associated infections. Profiling tests are particularly useful in at-risk patient groups, such as organ transplant patients.
- **Personalized Healthcare** – using molecular tests to guide the selection of therapies, including landmark QIAGEN companion diagnostics for testing the mutation status of genes such as KRAS, EGFR, BRAF and others that influence the effectiveness and safety profile of novel medicines for treatment of cancers and other diseases.
- **Point of Need** – enabling on-site diagnosis in physician practices, emergency rooms, remote field areas, and other settings where a laboratory infrastructure is not accessible and fast turnaround is required.

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 can process these samples very reliably and efficiently, often handling hundreds of samples concurrently. Other key factors are the range of assays for various diseases and biomarkers, convenience and ease of laboratory workflow, and reliability and standardization of lab procedures.

Our early-warning QuantiFERON®-TB Gold and QuantiFERON®-TB Gold Plus tests are leading the industry in screening to support tuberculosis control. Tuberculosis (TB) remains the largest killer of any infectious disease that sickens approximately 9 million people a year, causing 1.5 million deaths. The World Health Organization (WHO) estimates 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). About 5–10% of patients with LTBI are at risk of eventually developing active, contagious TB disease and this risk is significantly higher in certain groups such as immunocompromised or those receiving immunosuppressive medications. QuantiFERON-TB Gold more accurately detects latent TB infection, helping inform clinicians in decisions to initiate preventative therapy, thereby 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 emerging *careHPV* Test for use in low-resource regions of the world are important Prevention tests. The U.S. HPV business has declined to about 3% of our total sales amid vigorous price competition, even as *digene* HC2 remains the market-leading test. 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 Profiling, we offer 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. In 2015 we introduced new test kits for bacterial and viral infections with approvals in the United States, Europe or Canada, adding to the diagnostic toolkit of physicians and the content menu of assay technologies that will efficiently run on the QIASymphony automation platform. Among the 2015 launches were *artus*® HSV1/2 kits for herpes simplex virus type 1 and type 2; the *RespiFast* RG Panel, a multiplex test for detection and differentiation of 18 viruses and four bacteria in acute upper respiratory tract infections; the *RealStar*® Filovirus Screen RT-PCR kit for Ebola, Marburg and related viruses; and several other tests for detection of blood-borne or respiratory viruses.

QIAGEN's test portfolio for Personalized Healthcare covers a broad range of 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 2015 we launched the *therascreen*® EGFR RGQ Plasma PCR kit as the first CE-IVD liquid biopsy-based companion diagnostic test for EGFR mutation detection in lung cancer patients; the *ipsogen*® BCR-ABL1 MbcR RGQ RT-PCR kit as the first commercial CE-IVD test to provide deep molecular response status for monitoring the BCR-ABL1 biomarker in chronic myelogenous leukemia; and the second FDA approval for the *therascreen*® EGFR RGQ PCR kit, to guide the use of AstraZeneca's IRESSA® (gefitinib) in advanced or metastatic non-small cell lung cancer patients. A key element of our expansion in Personalized Healthcare is enabling laboratories to efficiently use these assay technologies on our QIASymphony platform. We also are developing companion diagnostics for our GeneReader NGS System and Modplex platform.

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. In 2015, we initiated a record number of co-development projects with existing and new partners and reached a milestone of

15 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.

We market a range of automation systems for low-, medium-, and high-throughput nucleic acid sample processing, assay setup and analysis in laboratories performing molecular diagnostics. The flagship platform is QIASymphony, based on its unique characteristics. 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's 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 growing in more and more areas of life as industry and government organizations apply standardized sample preparation and assay 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 water 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. In 2015, QIAGEN launched our new *investigator*<sup>®</sup> STR assay kits for forensic laboratories in the United States as the first new entrant in 20 years in the U.S. market for STR kits, meeting an important need as the U.S. forensics community upgrades its standards.

### 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, including the GeneGlobe portal, Ingenuity Variant Analysis and CLC Cancer Research Workbench informatics products, also are widely used by scientists to guide their 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 professionals use companion diagnostics to test for specific genetic biomarkers that help determine the safety and efficacy profiles of drugs in individual patients, achieving the best possible therapeutic results and avoiding unnecessary treatments. A wave of newly discovered biomarkers and companion diagnostics has begun to transform the treatment of an increasing number of 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 [4] 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.

[4] Net Sales by Product Categories

\$ 1,000	2015	2014	2013
<b>Net sales</b>			
Consumables and related revenues	1,114,580	1,172,728	1,140,203
Instrumentation	166,406	172,049	161,781
<b>Total</b>	<b>1,280,986</b>	<b>1,344,777</b>	<b>1,301,984</b>

### Geographical Information

QIAGEN currently markets products in more than 130 countries. The following table [5] 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):

[5] Net Sales by Geographic Regions

\$ 1,000	2015	2014	2013
<b>Net sales</b>			
Americas:			
United States	525,532	543,877	545,600
Other Americas	79,578	75,974	80,299
Total Americas	605,110	619,851	625,899
Europe, Middle East and Africa	409,955	451,092	416,334
Asia Pacific and Rest of World	265,921	273,834	259,751
<b>Total</b>	<b>1,280,986</b>	<b>1,344,777</b>	<b>1,301,984</b>

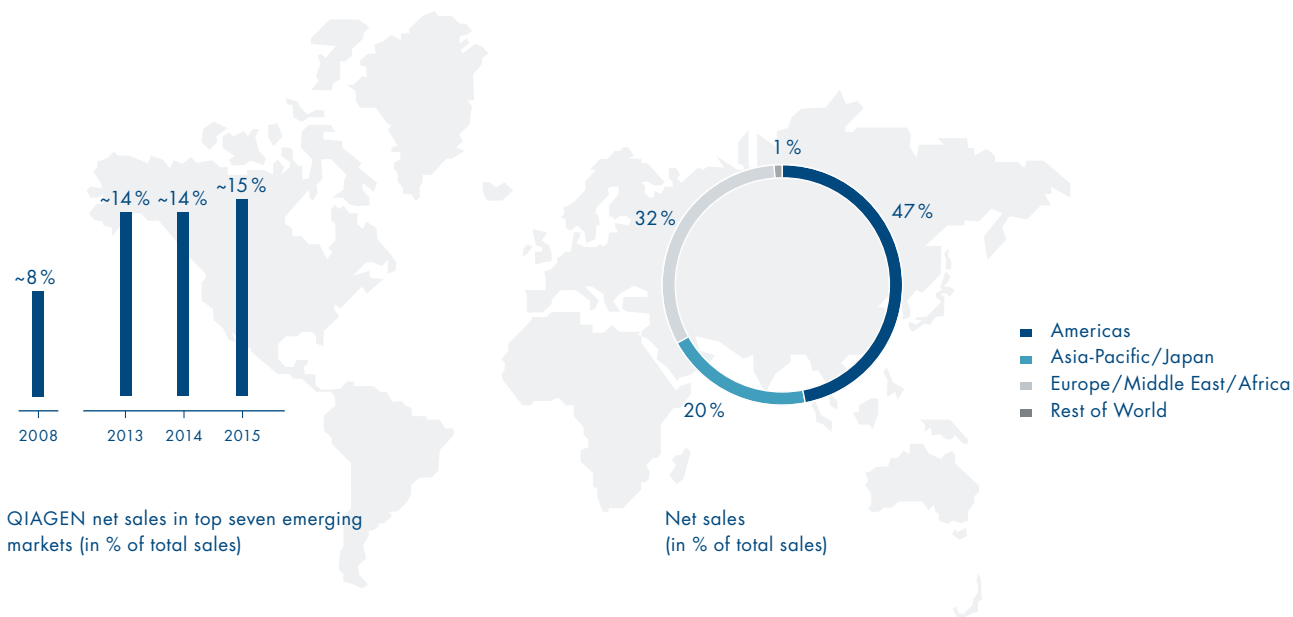
QIAGEN has built an increasing presence in key emerging markets as a growth strategy [6]. In 2015, the top seven emerging markets contributed approximately 15% net sales, advancing over weaker years in 2013 and 2014. Strong 2015 sales in Turkey, China, South Korea and India more than offset slowdowns in Mexico and Russia. China is our third-largest country by sales.

## Growth Drivers and Key Catalysts

We believe the combined global market for molecular diagnostics and molecular life science research products totals approximately \$ 15 billion. 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.

[6] Emerging Markets: Important Drivers of Future Growth



We are building momentum by continuing to focus on strategic growth drivers and key catalysts: [7]

- 1. Sample 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 2015 we further expanded our sample technologies by adding innovative technologies to enable “liquid biopsies” and cutting-edge research.
- 2. QuantiFERON-TB:** The modern standard for detecting latent tuberculosis infection, our QuantiFERON-TB Gold aids tuberculosis control by targeting subpopulations of at-risk patients in the United States, Europe and Asia. In 2015 we introduced QuantiFERON-TB Gold Plus, adding new technology to deliver even higher sensitivity and specificity in patients at greatest risk for TB infection, such as HIV-infected and other immunocompromised individuals.

- 3. Next-generation sequencing:** Our strategic initiative to drive NGS adoption in clinical research and diagnostics gained further momentum in 2015 with the introduction of our innovative GeneReader NGS System, providing a simpler, more cost-effective way for any laboratory to take advantage of NGS technology and improve outcomes. We also offer a broad portfolio of “universal” solutions for NGS users.
- 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. We also are a leading partner for pharmaceutical companies in co-developing products for personalized medicine.
- 5. QIASymphony:** We are driving global adoption of the QIASymphony automation platform, surpassing our target



of 1,500 cumulative placements in 2015, and expanding the content menu of test kits for the platform. Growing QIASymphony placements and offering a 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. Following the acquisitions of Ingenuity and CLC bio in 2013 and BIOBASE in 2014, we are expanding their software solutions, adding new applications and content for knowledge bases, and integrating them 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 the most 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:

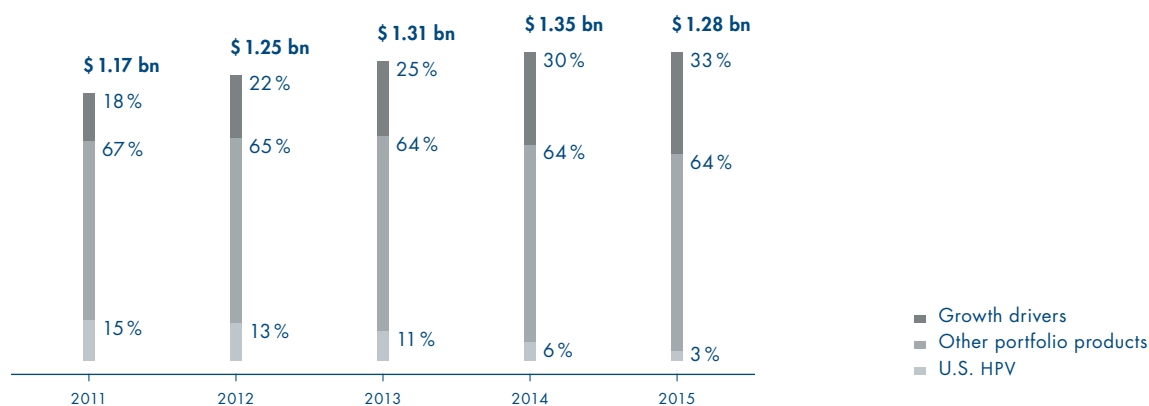
- Creating new systems for automation of workflows – platforms for laboratories, hospitals and other users of these novel molecular technologies.
- Expanding our broad portfolio of novel “content” – including assays to detect and measure biomarkers for disease or genetic identification.
- Integrating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

Our research and development investments are among the highest in our industry. More than 1,000 employees in research and development work in nine QIAGEN centers of excellence on three continents. Our comprehensive intellectual property portfolio spans more than 1,700 granted patents and more than 800 pending applications.

Innovations in instrumentation are strengthening our leadership in the automation of laboratories, driving dissemination of molecular testing in healthcare and other fields, and 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. Building on the QIASymphony platform, we plan to integrate additional modules for needs such as next-generation sequencing. QIAGEN also is developing a range of upgrades and enhancements for our GeneReader NGS System, which was introduced in 2015, to add further value for labs by addressing 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.

We are commercializing a deep pipeline of molecular assays for preventive screening and diagnostic profiling of diseases, assays for biomarkers to guide personalized medicine in cancer and other diseases, and tests for a broad range of other targets. An extensive development program has begun generating commercial launches of assays that add value to our QIASymphony RGQ platform for Molecular Diagnostics and other uses. In addition, we are investing in co-development of companion diagnostics for Personalized Healthcare through projects with pharmaceutical and biotech companies. In next-generation sequencing, we launched 14 new GeneRead™ DNAseq V2 gene panels in 2014, compatible with any NGS sequencer, as assays for an extensive range of cancer-related genes or gene regions. 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 devel-

## [7] Sales overview 2011–2015



oping 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 resources 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 high-quality products that offer customers unique value, coupled with commitment to technical excellence and customer service. We have developed a range of marketing tools to provide customers with direct access to technical support and to inform them of new product offerings, as well as to enhance our reputation for technical excellence, high-quality products and commitment to service. One such tool is our technical service hotline, which allows existing or potential customers to discuss a wide range of questions about our products and related molecular biology procedures, via phone or email, with Ph.D. and M.Sc. scientists at QIAGEN. Frequent communication with customers enables us to identify market needs, learn about new developments and business opportunities, and respond with new products.

Our website ([www.qiagen.com](http://www.qiagen.com)) and other digital channels make ordering easy with a full online product catalog and ordering. Our eCommerce team works with clients to provide automated processes supporting a wide variety of electronic transactions and all major eProcurement systems. Our website has full Japanese and Chinese language versions, plus some information in French, German and Korean. Information contained on our website, or accessed through it, is not part of this Annual Report.

Our GeneGlobe Genes & Pathways web portal ([www.gene-globe.com](http://www.gene-globe.com)) is a valuable outreach to scientists in Pharma and Academia, enabling researchers to search and order from more than 31 million PCR pre-designed assay kits and NGS assay panels. We have integrated GeneGlobe with our bioinformatics solutions, linking biological interpretation with ordering of the relevant laboratory assays to accelerate research.

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. 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 2015, our purchases of intangible assets totaled \$ 19.7 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, 2015, we owned 298 issued patents in the United States, 199 issued patents in Germany and 1,234 issued patents in other major industrialized countries. We had 859 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 "Risk Factors" included in Item 3 of the 2015 Annual Report on Form 20-F on file with the U.S. Securities and Exchange Commission 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 Sigma-Aldrich Corp. 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.

The medical diagnostics and biotechnology industries are subject to intense competition. In our HPV franchise within our molecular diagnostics customer class, we face competition from well-established diagnostic technologies, such as cytology, and from emerging HPV testing approaches, such as signal amplified testing, research-based PCR, other indicators of disease and other traditional testing methods developed by laboratories. Our competitors in the United States include companies such as Roche Diagnostics GmbH and Hologic, Inc., which have been marketing FDA-approved HPV testing products in the U.S. in recent years. We expect competition to intensify, but our leading position in the HPV market is supported by our marketing efforts and the data supporting our *digene* HPV Test. We believe we have a competitive advantage driven by the fact that close to 90 million of these tests have been distributed worldwide as well as a multitude of clinical trials encompassing more than one million women. A number of major U.S. customers for HPV screening products operate under multiyear contracts with us, in which we provide competitive pricing and other benefits.

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, com-

petitors' 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 if finalized will impose additional regulatory requirements on IVDs used in the EU. These new regulations are targeted to be approved in early 2016 with a 5 year implementation requirement. Once approved the entire EU IVD industry will have to undergo the transformation.

### 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. 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 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, includ-

ing 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 is currently reevaluating 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

Diagnostic tests may be used in the determination of whether a drug should be prescribed for a patient, and are often referred to as *in vitro* companion diagnostic devices. On August 6, 2014, the FDA issued Guidance for Industry and Food and Drug Administrative Staff on In Vitro Companion Diagnostic Devices. The Guidance applies to *in vitro* diagnostic companion diagnostic devices that provide information that is essential for the safe and effective use of a corresponding therapeutic drug. However, a novel *in vitro* diagnostic test that provides information that is useful in, but not a determining factor for the safe and effective use of a therapeutic product, would not be considered an IVD companion diagnostic. 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. The sponsor of the therapeutic product can decide to develop its own IVD Companion Diagnostic Device, partner with a diagnostic device sponsor to develop the appropriate IVD Companion Diagnostic Device, or explore modification of an existing IVD diagnostic device (its own or another sponsor's) to accommodate the appropriate intended use. 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 regis-

tered 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 by September 24, 2016 and 2018, respectively. QIAGEN was fully compliant with the initial phase of the new rule by the September 2014 deadline 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, we believe that some of our RUOs may be used by some customers in their laboratory-developed tests (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). In essence, the FDA is proposing to regulate Clinical Laboratory Improvement Act (CLIA) laboratories that provide LDT's that meet the definition of a Medical Device as stated in the Food, Drug, and Cosmetic Act. While the guidance is directed at CLIA laboratories it also has the potential to change the relationship between laboratories and manufacturers. It also proposes to impose quality systems controls and mechanisms, including submissions, on the laboratories. These are the identical requirements that are currently imposed on manufacturers as described in the prior paragraphs of this section. In January 2015, QIAGEN, along with many other companies and industry groups submitted comments and suggestions to the FDA regarding the Draft LDT Guidance. To date FDA has not finalized the Guidance. It is therefore, not possible to precisely assess potential impact until the Guidance is finalized. QIAGEN has an executive task force that is monitoring and participating in the draft process to insure the earliest possible awareness of developments related to the Draft Guidance.

### 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 imple-



mentation 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 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.

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. We require the disclosure of whole genome sequences in order to analyze and interpret genomic data for research use by our customers. 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, now 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.

### Environment, Health and Safety

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 Conflict Minerals findings to the Securities Exchange Commission for the calendar year ending December 31, 2014 on Form SD on April 1, 2015 and will provide updated disclosure to the Securities Exchange Commission annually.

## 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

Exhibit 8.1 to the 2015 Annual Report on Form 20-F filed with the U.S. Securities and Exchange Commission.

## 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, Denmark and India. 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 \$97.8 million, \$86.6 million and \$84.5 million for 2015, 2014 and 2013, 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 13485:2013, 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. We purchased additional office and warehouse space of approximately 23,700 square feet in 2015. Our production capacity is increased through our manufacturing and research facilities in the United States. QIAGEN Sciences, LLC owns a 27-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 Gene-Reader 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 and 30,000 square feet in Valencia for Customer Care, Sales and Marketing services. 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.

## Opportunities and Risks

QIAGEN, like any other company, has business operations that involve significant opportunities and risks. Effective management is paramount to safeguarding the sustainable value creation, and the central task of the leadership team. Managing opportunities and risks is an integral part of the corporate governance system in place throughout QIAGEN, not the task of one particular organizational unit. Management systems are in place to aggregate all risks and opportunities for review at the Managing Board and Supervisory Board levels of QIAGEN N.V., and these are reviewed on a routine basis. According to our current assessment, we consider the opportunities and risks to be manageable and the survival of QIAGEN not to be endangered at the end of 2015, which was the same position taken at the end of 2014. This assessment is supported by our strong balance sheet and the current business outlook, and further supported by the positive historical response to our external financing demands. As a result, QIAGEN has not sought an official rating by any of the leading ratings agencies. We are confident in the future earnings strength of QIAGEN and have access to the resources to pursue value-creating business opportunities.

### Opportunities

As an international company, QIAGEN is exposed to a wide variety of developments in the various markets in which it operates. Our mission is to “make improvements in life possible” by capturing growth opportunities presented by the dissemination of molecular technologies across the four customer classes in Molecular Diagnostics, Applied Testing, Pharma and Academia. Due to increased life expectancy for people living in developed countries, and also the dynamic growth of healthcare demand in many emerging markets, the need for innovative diagnostics is increasing at a marked pace. This is underscored by the proven benefits of diagnostics to improve healthcare outcomes, particularly the advent of companion diagnostics to personalize healthcare, while still representing

a small fraction of overall healthcare expenditures. Our internal R & D activities present major opportunities, and we are working to find new products and improve existing ones across our portfolio of Sample to Insight solutions. We also continuously evaluate potential additional opportunities across our four customer classes as an integral part of our strategy. All of these factors represent future growth opportunities for QIAGEN.

One of the most important senior management tasks at QIAGEN is to identify and assess opportunities as early as possible and to initiate appropriate measures in order to maximize the fullest value of opportunities and transform them into business success. QIAGEN evaluates organic growth opportunities each year as part of its annual budget planning process, and on an ongoing basis during the year, especially in dynamically changing areas of the business portfolio. These evaluations are based on proposals for new products, services and technologies developed within QIAGEN. This cross-functional process involves a careful analysis of the market environment and competitive positioning, as well as additional factors such as expected development timelines, regulatory and reimbursement issues when evaluating organic opportunities. Business plans include information about the product or service planned to be developed, along with profiles on target customers and competitors, market size and barriers to entry. It also outlines the resources required for implementation. As part of this process, these plans are subjected to a uniform profitability analysis to determine the net present value of an investment and the opportunities to create value (as measured with QIAGEN Value Added, or QVA) and generate returns that exceed the Group’s cost of capital after a multi-year period. The monitoring of growth initiatives is done through regular reporting to the Supervisory Board, which receives reports on a frequent basis during the year about the status and progress of key initiatives. Project management and the supporting central functions report directly to Peer M. Schatz, the CEO of QIAGEN.

## 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: [8]

- 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 Item 10 of the 2015 Annual Report on Form 20-F) and the function of the Audit Committee of the Supervisory Board (discussed in more detail in Item 6 of the 2015 Annual Report on Form 20-F). We maintain adequate internal controls over financial reporting to ensure the integrity of financial reporting, which is described further in Item 15 of the 2015 Annual Report on Form 20-F. Additionally, a Compliance Committee operates under the leadership of the Chief Financial Officer, who is also a member of the Managing Board, 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 as described further in Item 16B of the 2015 Annual Report on Form 20-F.

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.

## Risks

This section outlines a number of significant risks to which QIAGEN is exposed. The order in which the risks are listed is not intended to imply an assessment as to the likelihood of their materialization or the extent of any resulting damages.



[8] Risk Types

Base Business Risk	Business Growth Risk	Underlying Business Risk
<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>	<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>	<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>

They should be seen in light of the opportunities that could result from positive trends. For further information, refer to the risks and uncertainties discussed under the caption “Risk Factors” in Item 3 of the 2015 Annual Report on Form 20-F on file with the U.S. Securities and Exchange Commission and throughout this Annual Report.

*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 \$ 1.28 billion in 2015 from \$ 1.17 billion in 2011. We have made a series of acquisitions in recent years, including 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. We also continue to upgrade our operating and financial systems and expand the geographic presence of our operations, which has resulted in the reallocation of existing resources or the hiring of new employees as well as increased responsibilities for both existing and new management personnel. The expansion of our business and the addition of new personnel may place a strain on our management and operational systems.

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;

- 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 health-care 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 limit 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 United States enacted major healthcare reform legislation known as the Patient Protection and Affordable Care Act (ACA) which is expected to impact the scope and nature of Medicare reimbursement methods. As a result, the biotechnology, diagnostics and pharmaceutical industries are exposed to the potential risk of price controls by these entities. 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 impedi-

ments 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 “home-brew” or lab-developed methods, where widely available reagents and other chemicals are used in a non-standardized manner to perform sample and assay processing. 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. The success of our business depends in part on the continued conversion of current users of “home brew” methods 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 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 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* diagnostics 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. If we fail to obtain any required clearance or approvals, it could

significantly damage our business in these markets. While this is fully established today, the European Commission and the European parliament have approved a major recast to this directive. While this recast is still in the final stages of the political process called the “Trilogue”, once implemented it will re-classify medical devices, add additional emphasis on clinical efficacy and bring this into a new legal framework. It is anticipated that industry will have at least 5 years to fully implement this after the approval but this is still in negotiation as part of the Trilogue.

Several of our key products and programs are medical devices 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 as medical devices. Regulatory agencies in other countries also have medical device 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 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 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 “Laboratory-Developed Tests” (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 begin regulating lab-developed tests in a phased-in approach, but details of proposed regulations have not yet emerged. 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 QIASymphony 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 incorporates 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, such as the U.S. health care reform legislation that was signed into law in the U.S. in 2010. 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 components 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 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, 2015, we had outstanding long-term debt of approximately \$ 1.1 billion, of which no amount was current. Furthermore, as of December 31, 2015, we had capital lease obligations, including the current portion, of \$3.3 million, that expire in various years through 2018. We may need to refinance all or part of these liabilities before or at their contractual maturities.

We currently do not foresee that this will happen, but 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 13, "Derivatives and Hedging" and Note 15 "Lines of Credit and Debt," 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 state-

ments 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.

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

At December 31, 2015, our consolidated balance sheet reflected approximately \$ 1.9 billion of goodwill and approximately \$636.4 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. U.S. generally accepted accounting principles (U.S. GAAP) requires 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.

*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 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 15% of total sales in 2015, 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.

*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 intellectual property, our 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. A breach in cyber security due to gaining unauthorized access to our computer systems 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 of brand damage with customers or partners.

Additionally, we are subject to privacy and data security laws, 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 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, 2015, we owned 298 issued patents in the United States, 199 issued patents in Germany and 1,234 issued patents in other major industrialized countries. In addition, at December 31, 2015, we had 859 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.

A significant portion of HPV-related intellectual property is in the public domain, while additional HPV-related intellectual property is subject to our patents some of which will begin to expire in the next few years or are licensed to us on a non-exclusive basis. As a result, other companies have developed or may develop HPV detection tests.

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 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 \$28.53 to a low of \$19.46 on NASDAQ, and a high of €26.05 to a low of €14.38 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.*

We have not paid cash dividends since our inception and do not anticipate paying any cash dividends on our Common Shares for the foreseeable future. Although we do not anticipate paying any cash dividends, 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. In-



vestors 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. 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 our existing Common Share holders. 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, our Common Share holders 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 €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 €0.01 par value. As of December 31, 2015, a total of approximately 233.0 million Common Shares

were outstanding along with approximately 10.8 million additional shares reserved for issuance upon exercise or release of outstanding stock options and awards, of which 1.7 million were vested. A total of approximately 19.7 million Common Shares are reserved and available for issuances under our stock plans as of December 31, 2015, 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, 2015, 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.

*Our operations have inherent IT risks.*

Business and production processes are increasingly dependent on information technology systems. Major disruptions or failure of global or regional business systems may result in the loss of data and/or impairment of business and production processes. QIAGEN has established a global IT organization with rules and regulations that define the relevant roles and responsibilities, and also works with external partners that provide certain operative IT functions. Technical precautions have been established together with our IT service providers to address this risk.

## Performance Review

### 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.

This section contains a number of forward-looking statements. These statements are based on current management expectations, and actual results may differ materially. Among the factors that could cause actual results to differ from management’s expectations are those described in “Risk Factors” and “Forward-looking and Cautionary Statements” in Item 3 of the 2015 Annual Report on Form 20-F available on our website and filed with the U.S. Securities and Exchange Commission.

### 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 Prevention, Profiling of diseases, Personalized Healthcare and Point of Need testing
- **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, 2015, we employed approximately 4,600 people in more than 35 locations worldwide.

### Recent Acquisitions

We have made a number of strategic acquisitions since 2013, 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 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 adds a complementary portfolio of sample technologies to QIAGEN's universal solutions for next-generation sequencing. MO BIO's currently marketed kits, based on its 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 under development for molecular testing through less-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, which offer improved treatment monitoring and earlier detection of tumor relapse.

- **In December 2014**, we acquired the enzyme solutions business of Enzymatics, a U.S. company whose products are used in an estimated 80% of all next-generation sequencing workflows. The comprehensive Enzymatics portfolio complements QIAGEN's leading offering of universal NGS products, advancing our strategy to drive the adoption of NGS in clinical healthcare.
- **In April 2014**, we acquired BIOBASE, a provider of expertly curated biological databases, software and services based in Wolfenbüttel, Germany, further expanding our industry-leading bioinformatics solutions. These integrated solutions provide a complete workflow for handling genomic data from biological sample to valuable molecular insights. The content from BIOBASE includes gold-standard data in the fields of inherited diseases and pharmacogenomics. In July, QIAGEN and BGI Tech Solutions Co. announced a distribution and service relationship for the BIOBASE Human Gene Mutation Database (HGMD) in China, Taiwan, Hong Kong and Macao. QIAGEN also has integrated the BIOBASE content into the Ingenuity Knowledge Base, adding value for customers in interpreting genomic data from next-generation sequencing (NGS).
- **In August 2013**, we acquired CLC bio, a global leader in bioinformatics software with a focus on next-generation sequencing. CLC bio, a privately-held company based in Aarhus, Denmark, has created the leading commercial data analysis solutions and workbenches for NGS. CLC bio's leading products are CLC Genomics Workbench, a comprehensive and user-friendly analysis package for analyzing, comparing and visualizing NGS data; CLC Cancer Research Workbench, focusing on genomic analysis for oncology; and CLC Genomics Server, a flexible enterprise-level infrastructure and analysis backbone for NGS data analysis.

- In April 2013, we acquired Ingenuity Systems, Inc., the leading provider of software solutions that efficiently and accurately analyze, interpret and report the biological meaning of genomic data. Ingenuity, a privately-held U.S. company based in California's Silicon Valley, created a market leading, expertly curated knowledge system of biomedical information and analysis solutions for the exploration, interpretation and analysis of complex biological systems. New technologies such as next-generation sequencing (NGS) are now generating more data in a single year than was created in all prior history, making the analysis and interpretation of this extensive and very complex biological data a critical success factor.
- 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. As of December 31, 2015, we held 97.22% of the shares in QIAGEN Marseille, and we anticipate that we will obtain full ownership during the first quarter of 2016.

Our financial results include the contributions of our 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 ASC Topic 280, Segment Reporting. 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 2015, we determined that we still operate as one business segment. We provide certain revenue information by customer class to allow better in-

sight into our operations. This information is estimated using certain assumptions to allocate revenue among the customer classes.

## Year Ended December 31, 2015, Compared to 2014

### Net Sales

In 2015, net sales decreased 5% to \$1.28 billion compared to \$1.34 billion in 2014, due to about eight percentage points of adverse currency movements. Excluding the effect of adverse currency movements, total growth reflected higher contributions from consumables and related revenues (+3%/87% of sales) and instruments (+5%/13% of sales). Excluding the effect of adverse currency movements, about two percentage points of total sales growth came from the acquisitions of the Enzymatics NGS technology and consumables portfolio (acquired in December 2014) and the BIOBASE bioinformatics business (acquired in April 2014), while sales in the rest of the business provided about one percentage point. Late in the fourth quarter of 2015, we completed the acquisition of MO BIO Laboratories Inc., a leader in sample technologies for metagenomics and microbiome analysis, but this had a negligible contribution to net sales in 2015. Excluding the expected impact of sharply lower U.S. sales of HPV tests, which created approximately three percentage points of headwind, as well as the effect of adverse currency movements, net sales rose approximately 6% in 2015.

**Geographic regions:** Excluding the loss of 15 percentage points of sales growth due to adverse currency movements, the Europe/Middle East/Africa region led the geographic performance, benefiting from gains in Germany and Turkey, as well as improving performances in other countries. The Americas advanced at a faster pace (+7%) when excluding U.S. HPV test sales and when excluding 3 percentage points of adverse currency movements. Asia-Pacific/Japan advanced on gains in China and ongoing robust growth in South Korea while Japan sales declined on macro challenges when excluding 8 percentage points of adverse currency movements.

Turkey, China, South Korea and India led results for the top emerging markets (+8%/15% of sales) against declining sales in Mexico and Russia when excluding adverse currency movements of 10 percentage points.

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

**Molecular Diagnostics**, which contributed approximately 50% of net sales, declined 7% in 2015 reflecting adverse currency movements of eight percentage points of sales growth in 2015. The core portfolio delivered approximately 7% growth before adverse currency impacts and the ongoing decline in sales of U.S. HPV test products (-43%/3% of sales). Sales of consumables used on the QIASymphony automation platform also grew at a solid pace for the full year, as QIAGEN achieved its goal for new QIASymphony placements, but revenues were negatively impacted by multi-year reagent rental agreements. Personalized Healthcare sales also grew at a higher-single-digit rate for the year.

**Applied Testing** represented approximately 9% of net sales, declined 1% in 2015 compared to 2014 with adverse currency movements resulting in a loss of eight percentage points of sales growth. Before negative currency impacts, Applied Testing maintained a higher-single-digit growth pace for consumables and related revenues during 2015, while instruments grew at a lower-single-digit rate in the fourth quarter and for the year. All regions showed gains, in particular for products used in human ID/forensics.

**Pharma** sales growth remained unchanged compared to 2014 and provided approximately 19% of sales with adverse currency movements resulting in a loss of six percentage points of sales growth. Before negative currency impacts, Pharma advanced on mid-single-digit growth for both instruments and consumables and related revenues in 2015. The Europe/Middle East/Africa region and the Americas offset lower sales in Asia-Pacific/Japan.

**Academia** represented approximately 22% of net sales and declined 4% in 2015 compared to 2014 with adverse currency

movements resulting in a loss of ten percentage points of sales growth. Academia advanced on higher-single digit growth rates for instruments while consumables and related revenues grew at a mid-single digit rate during the course of the year before negative currency impacts. The Americas led growth among all regions and benefited from more positive customer funding trends.

### Gross Profit

Gross profit was \$826.4 million, or 65% of net sales, in 2015, compared with \$864.9 million, or 64% of net sales, in 2014. Adverse currency movements negatively impacted gross profit in 2015 by \$71.9 million. Generally, our consumable 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. Further, amortization expense related to developed technology and patent and license rights, which have been acquired in business combinations, is included in cost of sales. Gross profit in 2014 was impacted by charges of \$26.4 million recorded in cost of sales in connection with internal restructuring efforts as well as those related to acquisitions. In 2014, these charges included \$24.2 million in impairments and \$2.2 million in contract termination costs as discussed in Note 6 in the accompanying consolidated financial statements.

Cost of sales includes amortization expense related to developed technology and patent and license rights acquired in business combinations. The amortization expense on acquisition-related intangibles within cost of sales increased slightly to \$84.5 million in 2015 from \$81.7 million in 2014. Acquisition-related intangible amortization would increase in the future should we make further acquisitions.

### Research and Development

Research and development expenses decreased by 10% to \$147.2 million (11% of net sales) in 2015, compared to \$163.6 million (12% of net sales) in 2014. The decrease in research and development expenses is primarily due to \$14.3 million of favorable currency exchange impacts. During 2015, we introduced our GeneReader NGS System

and will continue to invest in research and development as we are developing 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. Further, business combinations, along with the acquisition of new technologies, may increase our research and development costs in the future. 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. 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 decreased 4% to \$361.0 million (28% of net sales) in 2015 from \$376.9 million (28% of net sales) in 2014. The decrease was driven by \$33.5 million of favorable currency exchange impact which more than offset costs resulting from increased sales and marketing activities. Sales and marketing expenses are primarily associated with personnel, commissions, advertising, trade shows, publications, freight and logistics expenses, United States medical device excise tax (which has been suspended for 2016 and 2017) and other promotional expenses. During 2015, we continued investments in our commercialization activities related to our sales force and e-commerce initiatives which more than offset the favorable currency impacts and lower compensation costs following a reassessment of stock units with performance criteria. We anticipate that sales and marketing costs will increase along with new product introductions and growth in sales of our products.

### General and Administrative, Restructuring, Integration and Other

General and administrative, business integration, restructuring and related costs decreased by 18% to \$103.9 million (8%

of net sales) in 2015 from \$126.6 million (9% of net sales) in 2014. The comparison was affected by \$8.3 million in restructuring costs in 2014 related to internal restructuring of subsidiaries, including severance and retention costs as discussed in Note 6 in the accompanying consolidated financial statements. The decrease in general and administrative, business integration, restructuring and related costs includes a \$9.9 million favorable currency exchange impact. Additionally, share based compensation costs were lower compared to 2014 following a reassessment of stock units with performance criteria. During 2015 and 2014, we incurred acquisition transaction costs of approximately \$7.5 million and \$2.0 million, respectively primarily in connection with the 2015 acquisitions, including MO BIO Laboratories, and the 2014 acquisitions of Enzymatics and BIOBASE. As we further integrate the acquired companies and pursue other opportunities to gain efficiencies, we expect to continue to incur additional business integration in 2016. Over time, we believe the integration activities will reduce expenses as we improve efficiency in operations.

### Acquisition-Related Intangible Amortization

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 operating expense under the caption "acquisition-related intangible amortization." 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 use of the asset.

During 2015, amortization expense on acquisition-related intangibles within operating expense increased to \$38.7 million, compared to \$37.1 million in 2014. We expect acquisition-related intangible amortization will increase as a result of our future acquisitions.

### Other Income (Expense)

Other expense was \$43.2 million in 2015, compared to \$42.3 million in 2014. Total other expense, net is primarily the result of interest expense and other expense, partially

offset by interest income and impacts of foreign currency transactions. Included in other income (expense), net for the year ended December 31, 2015, is a \$7.6 million loss recognized on the repurchase of the \$130.5 million loan payable to and warrant agreement with QIAGEN Finance. For the year ended December 31, 2014, a \$4.6 million loss recognized on the redemption of the \$300 million loan payable to and subscription right with QIAGEN Euro Finance is included. Both transactions are discussed more fully in Note 15 to the consolidated financial statements.

For the year ended December 31, 2015, interest income increased to \$4.8 million from \$4.0 million in 2014. Interest income includes interest earned on cash, cash equivalents and short term investments, income related to certain interest rate derivatives entered into in 2015 as discussed in Note 13 and other components including the interest portion of operating lease transactions.

Interest expense decreased to \$37.4 million in 2015, compared to \$39.3 million in 2014. Interest costs primarily relate to debt, discussed in Note 15 in the accompanying notes to the consolidated financial statements. Interest expense decreased primarily as a result of the repayments of the 2006 Notes as discussed in Note 15 to the consolidated financial statements.

For the year ended December 31, 2015, we recorded net losses on foreign currency of \$0.5 million compared to net gains of \$1.9 million in 2014. These gains and losses are due to foreign currency rate fluctuations.

### 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%. 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 2015 and 2014, our effective tax rates were 4% and 1%, respectively. In 2014, The Netherlands' tax expense was favorably impacted by fully tax exempt in-

come related to financing activities which concluded in 2014 and 2015 and accordingly, the related income tax benefit will not impact our effective tax rate beyond 2015. Additionally, in 2015 and 2014, 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 and Switzerland. These foreign tax benefits are due to a combination of favorable tax laws, rules, 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 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.

### Foreign Currencies

QIAGEN N.V.'s reporting 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. The net (loss) gain on foreign currency transactions in 2015, 2014 and 2013 was \$(0.5) million, \$1.9 million, and \$5.6 million, respectively, and is included in other income (expense), net.

**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 and variable rate debt. 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 speculative purposes. We recognize all derivatives as either assets or liabilities on the balance sheet, 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 determining fair value, we consider both the counterparty credit risk and our own creditworthiness. 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, which effectively eliminates credit risk.

**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 our balance sheet exposure on a group-wide basis primarily using foreign exchange forward and option contracts as well as cross-currency swaps.

**Interest Rate Derivatives.** We use interest rate derivative contracts on certain borrowing transactions to hedge interest rate exposures. We have entered into interest rate swaps in which we agree 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 13 to the accompanying consolidated financial statements.

## 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 ex-

penditure requirements and acquisitions. As of December 31, 2015 and 2014, we had cash and cash equivalents of \$290.0 million and \$392.7 million, respectively. We also had short-term investments of \$130.8 million at December 31, 2015. 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, 2015, cash and cash equivalents had decreased by \$102.7 million from December 31, 2014, primarily as a result of cash used in financing activities of \$258.6 million and cash used in investing activities of \$146.2 million, partially offset by cash provided by operating activities of \$317.5 million. As of December 31, 2015 and 2014, we had working capital of \$693.3 million and \$717.1 million, respectively.

**Operating Activities.** For the years ended December 31, 2015 and 2014, we generated net cash from operating activities of \$317.5 million and \$288.0 million, respectively. While net income was \$126.9 million in 2015, non-cash components in income included \$191.5 million of depreciation and amortization. Operating cash flows include a net decrease in working capital of \$23.6 million excluding changes in fair value of derivative instruments. The current period change in working capital is primarily due to increased accounts receivables and inventories and decreased accrued liabilities, partially offset by cash payments collected from derivative contracts. 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 \$146.2 million of cash was used in investing activities during 2015, compared to \$407.6 million during 2014. Investing activities during 2015 consisted principally of \$317.6 million for purchases of short-term investments, fully offset by \$367.7 million from the sale of short-term investments, \$97.8 million in cash paid for purchases of property and equipment, including our construction projects in the U.S and software development costs, as well as \$19.7 million paid for intangible assets. Cash paid for

acquisitions, net of cash acquired, of \$66.9 million represents the total cash paid for three acquisitions, including the acquisition of MO BIO Laboratories. As of December 31, 2015, we also had made strategic investments of \$6.1 million in privately held companies as discussed in Note 10.

In connection with certain acquisitions, we could be required to make additional contingent cash payments totaling up to \$67.8 million based on the achievement of certain revenue and operating results milestones as follows: \$40.2 million in 2016, \$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 \$67.8 million total contingent obligation, we have assessed the fair value at December 31, 2015, to be \$17.7 million, of which of which \$10.7 million is included in other long-term liabilities and \$7.0 million is included in accrued liabilities in the accompanying balance sheet as of December 31, 2015.

**Financing Activities.** Approximately \$258.6 million of cash was used in financing activities for the year ended December 31, 2015 compared to cash provided by financing activities of \$192.8 million in 2014. 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 "Lines of Credit and Debt." In 2014, the net proceeds from the issuance of the Cash Convertible Notes and the Warrants, net of the cost of the purchased Call Options, were substantially used to fund the redemption of the 2006 Notes and related subscription right also 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.

In October 2015, we extended the maturity of our €400 million syndicated revolving credit facility, which now has a contractual lifetime until December 2020 of which no amounts were utilized at December 31, 2015. The facility can be utilized in euro, British pounds sterling 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, six or twelve months. We have additional credit lines totaling €36.6 million with no expiration date, none of which were utilized as of December 31, 2015. We also have capital lease obligations, including interest, in the aggregate amount of \$4.0 million, and carry \$1.1 billion of long-term debt, of which no amounts are current as of December 31, 2015.

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.

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) income, net.

In October 2012, we completed a 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%). Approximately €170 million (approximately \$220 million) of proceeds from the notes were used to repay amounts outstanding under our short-term revolving credit facility. The remainder of the proceeds provides additional resources to support QIAGEN's longer-term business expansion.

In 2012, our Supervisory Board approved a program authorizing management to purchase up to a total of \$100 million of our common shares (excluding transaction costs). We completed this share repurchase program in April 2013 having repurchased, between October 2012 and April 2013, a total of 5.1 million QIAGEN shares for an aggregate cost of \$99.0 million.

In 2013, we announced a second share buyback program, to purchase up to another \$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. Repurchased shares will be held in treasury in order to satisfy obligations for exchangeable debt instruments 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.

## Off-Balance Sheet Arrangements

Other than our former arrangements with QIAGEN Finance and QIAGEN Euro Finance as discussed in Note 15 to the consolidated financial statements, we did not use special purpose entities and do not have off-balance sheet financing arrangements as of and during the years ended December 31, 2015, 2014 and 2013.

## Contractual Obligations

As of December 31, 2015, our future contractual cash obligations are as follows:

### [9] Contractual Obligations

	Total	2016	2017	2018	2019	Payments due by period	
						2020	Thereafter
<b>\$ 1,000</b>							
Long-term debt <sup>1</sup>	1,172,972	18,869	18,869	18,869	487,317	14,928	614,120
Purchase obligations	99,212	67,609	15,970	8,453	7,044	136	—
Operating leases	54,444	18,166	12,894	8,207	5,878	4,376	4,923
License and royalty payments	7,794	1,333	1,277	1,221	1,151	1,151	1,661
Capital lease obligations <sup>2</sup>	4,024	1,307	1,212	1,505	—	—	—
<b>Total contractual cash obligations</b>	<b>1,338,446</b>	<b>107,284</b>	<b>50,222</b>	<b>38,255</b>	<b>501,390</b>	<b>20,591</b>	<b>620,704</b>

1 Amounts include required principal, stated at current carrying values, and interest payments.

2 Includes future cash payments, including interest, due under capital 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 \$67.8 million based on the achievement of certain revenue and operating results milestones as follows: \$40.2 million in 2016, \$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, 2015, we have accrued \$17.7 million.

Liabilities associated with uncertain tax positions, including interest and penalties, are currently estimated at \$18.1 million and are not included in the table above, as we cannot reasonably estimate when, if ever, an amount would be paid to a government agency. Ultimate settlement of these liabilities is dependent on factors outside of our control, such as examinations by each agency and expiration of statutes of limitation for assessment of additional taxes.

## Share Repurchase Program

In 2012, the Supervisory Board approved a program authorizing management to purchase up to a total of \$100 million of our common shares (excluding transaction costs). We completed this share repurchase program in April 2013 having repurchased, between October 2012 and April 2013, a total of 5.1 million QIAGEN shares for an aggregate cost of \$99.0 million.

In 2013, we announced a second share buyback program, to purchase another \$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 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.

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.

Table [10] sets out information concerning repurchases of our common shares, which we intend to use to serve our exchangeable debt instruments and employee share-based remuneration plans.

Purchases between January 1, 2015 and December 31, 2015 were made in accordance with the authorization to acquire and use treasury shares granted at the Annual General Meeting of Shareholders on June 25, 2014 (the 2014 program), pursuant to which the Managing Board was authorized to acquire up to \$100 million of QIAGEN common shares of the 2014 program. The 2014 program expired in December 2015. No further amounts are available for purchase under the 2014 program as of December 31, 2015.

#### [10] Repurchases of Common Shares

Period	(a) Total number of shares purchased	(b) Average price paid per share in \$ <sup>1</sup>	(c) Total number of shares purchased as part of publicly announced plans and programs	(d) Approximate dollar value of shares that may yet be purchased under these plans and programs (in millions) <sup>2</sup>
January 1 to April 30, 2015	—	—	—	\$50.9
May 1–31, 2015	152,495	\$24.51	152,495	\$47.1
June 1–30, 2015	458,200	\$24.56	458,200	\$35.9
July 1–31, 2015	153,600	\$24.72	153,600	\$32.1
August 1–31, 2015	12,200	\$26.94	12,200	\$31.7
September 1–30, 2015	65,066	\$26.12	65,066	\$30.1
October 1 to December 31, 2015	—	—	—	\$0.0
Total	841,561	\$24.74	841,561	

1 The average price paid per share of stock repurchased under the stock repurchase program includes the commissions paid to the brokers.

2 The approximate value of shares that may yet be purchased under these plans and programs does not include commissions that may be paid to brokers in connection with such purchases.

## Dividend

QIAGEN has not paid a cash dividend since its inception and does not intend to pay any dividends in the foreseeable future. We intend to retain any earnings for the development of our business.

## Credit Rating

QIAGEN is currently not rated by any credit rating agency.

# Human Resources

## Overview

The skills, knowledge, dedication and passion of our employees are critical for the success of QIAGEN. We want to recruit, support and retain the best employees, offering performance-based remuneration, development opportunities and measures to balance work and family life. We are committed to diversity in our teams that reflect the various backgrounds of our business partners. Even in a challenging business environment, QIAGEN has a significant commitment to becoming an employer of choice and further enhancing our position as a great place to work.

At the end of 2015, QIAGEN had 4,559 full-time equivalent employees, a 5% increase from 4,339 at the end of 2014. [11] Total personnel expenses excluding share-based compensation in 2014 were \$389 million compared to \$402 million in 2014.

## Code of Ethics

QIAGEN has in place a Code of Conduct which qualifies as a code of ethics, as required by SEC and NASDAQ Marketplace Rules. The Code of Conduct applies to all of QIAGEN's employees, including our principal executive officer, principal financial officer, principal accounting officer or controller and other persons performing similar functions. The full text of the Code of Conduct is available on our website at [www.qiagen.com](http://www.qiagen.com).

## Training and Retention

At QIAGEN, we recognize that employees are our most important resource. Their exceptional talent, skill, and passion are key to our long-term success and corporate value. Employee development is therefore viewed as an integral success factor in creating lasting value for our customers, patients, colleagues, partners, and shareholders.

QIAGEN has established a global Performance Enhancement System (PES) that creates a clear framework for regular, one-on-one review sessions in which managers discuss career development topics with each of their employees. These sessions include discussions of goals and their achievement, training needs and interests, career planning, organizational development, and the results of regularly performed "180° surveys." Professional training and development at QIAGEN is an ongoing process reaching all employees, which cycles from PES to participation, review, follow-up, and back to PES.

## Management Campus (MC)

This program, which is composed of three components, is designed to ensure the ongoing development of QIAGEN's future management generations. MC for Starters prepares high-performing employees to take an initial leadership position. The program provides leadership basics and an overview of relevant business management topics. MC I accelerates the careers of our professionals by providing further insights into advanced leadership and management topics while focusing on individual development and business-related innovative actions. MC II is a senior executive program that is designed to increase the leadership skills and management knowledge of outstanding QIAGEN senior managers by a

more individual development approach. The program mainly focuses on leadership coaching sessions, as well as on business-related innovative actions.

## QIAGEN Executive MBA Program

To support our future growth, QIAGEN offers employees the opportunity to participate in the QIAGEN Executive MBA Business Integration Program in cooperation with the University of Würzburg, Germany. The program provides professionals with a wide range of management skills and knowledge, which are key to an executive career in the industry and at QIAGEN in particular. Participants study in an international environment with colleagues from around the world. Two modules are conducted with partner universities in the U.S.: at Boston University in Boston, Massachusetts, and at Florida Gulf Coast University in Fort Myers, Florida. By the end of 2016, a total number of 106 QIAGEN employees will complete the MBA program.

## Compensation System

Since the creation of QIAGEN, management has formed a culture that seeks to attract and retain the best talent worldwide and reward associates for their performance. This compensation system aims to foster focus on achieving corporate strategic initiatives as well as personal accountability.

It is critical for QIAGEN to offer attractive compensation packages on a global basis. According to the QIAGEN philosophy, an employee who achieves his or her performance objectives should generally be awarded compensation comparable to the median levels of compensation provided by relevant benchmark companies. QIAGEN participates in various compensation benchmarking surveys that provide information on the level, as well as the mix, of compensation awarded by various companies and industries for a broad range of positions around the world. In the case of QIAGEN,

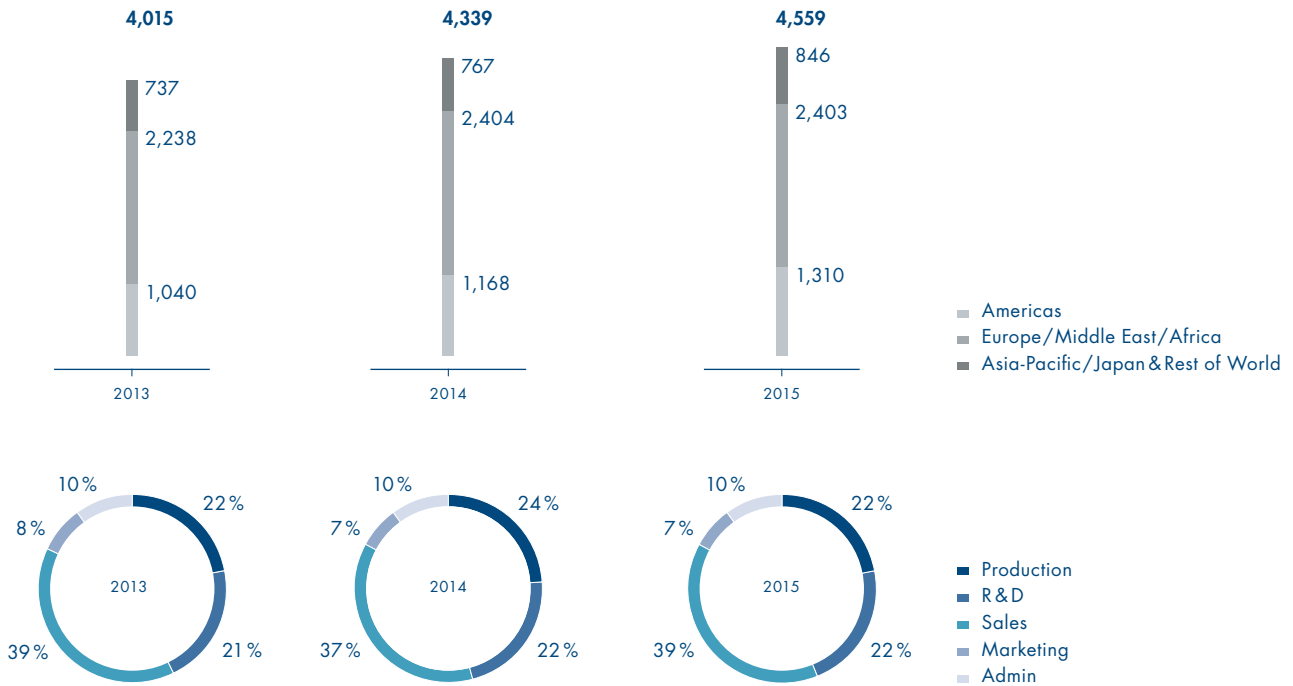
these include many peer life science and diagnostics companies based in the U.S.

QIAGEN has a “pay for performance” culture, with the compensation of employees linked to the achievement of corporate financial and individual performance goals. Business goals are established by senior management. These goals are set at ambitious levels each year to motivate and drive performance, with a focus on both short-term and long-term quantifiable objectives. Performance metrics used for these goals include the achievement of targets for net sales, adjusted operating income and free cash flow. In 2015, the payments for short-term variable compensation were based on 76% achievement of the business goals.

Compensation for a significant majority of employees worldwide includes fixed base compensation and benefits, which vary according to local market customs, as well as a short-term variable cash bonus. The level of fixed compensation is paid in cash, usually on a monthly basis, and is designed to provide the employee with a reasonable standard of living relative to the compensation offered by peer companies. The amount of short-term variable cash bonus is designed to reward performance, with the payout amount based on the achievement of overall corporate financial results as well as individual performance against a written set of objectives. In the case of the Managing Board members, the maximum individual bonus is equivalent to 40% of the annual fixed salary. Furthermore, to align our compensation programs with the interests of shareholders, senior executives receive a portion of their total compensation in the form of long-term compensation, which is granted as equity as a reward for performance. These grants are determined on an individual basis and approved by the Compensation Committee. These equity grants are made in the form of Performance Stock Units (PSUs) with a staggered vesting period typically over three (40%), five (50%) and 10 years (10%).

In the case of the Managing Board members, the maximum individual bonus is equivalent to 40% of the annual fixed

[11] Employees Worldwide



salary. Furthermore, to align our compensation programs with the interests of shareholders, senior executives receive a portion of their total compensation in the form of long-term compensation, which is granted as equity as a reward for performance.

These grants are determined on an individual basis and approved by the Compensation Committee. These equity grants are made in the form of Performance Stock Units (PSUs) with a staggered vesting period typically over three (40%), five (50%) and 10 years (10%).



## Work-Life Balance

QIAGEN introduced services to help employees balance their personal life with our dynamic and driven work environment, including in-house corporate childcare and sabbatical programs, as well as company-sponsored fitness and health facilities, and programs. Flexible working hours apply to all employees except for functions that require on-time presence.

## Workplace Health

In today's business climate, the health of employees is often directly related to the health of the company. Increased job satisfaction, improved morale, reduced injuries, and increased productivity are just some of the benefits which a healthy work environment can have. At its headquarters, QIAGEN regularly offers "health days" where all employees are invited to receive free counsel and to participate in screening and nutrition programs, medical check-ups, etc.

QIAGEN provides in-house gyms open to all employees, sports courses coached by professional trainers, and on-site soccer fields and beach volleyball courts, all free of charge. All female employees have free access to screening for HPV, the primary cause of cervical cancer.

# Sustainability

QIAGEN follows a comprehensive approach to sustainability, aiming to reduce the environmental impact of our business, promote healthy and high-performance workplaces that enable both professional and personal development, drive long-lasting growth, and to help people across the globe live better lives. [12]

We believe that these three dimensions are closely interlinked, influencing and benefiting each other. We pledge to continually evaluate the potential impact of our business on those dimensions. Our commitment to sustainability will not stop when formal requirements are fulfilled. As a market and innovation leader in life sciences and molecular diagnostics, we strive to go above and beyond simply observing environmental and labor law regulations. There is much room for innovation when it comes to driving sustainable development in our industry and we are resolved to further capitalize on this potential.

## Green Development

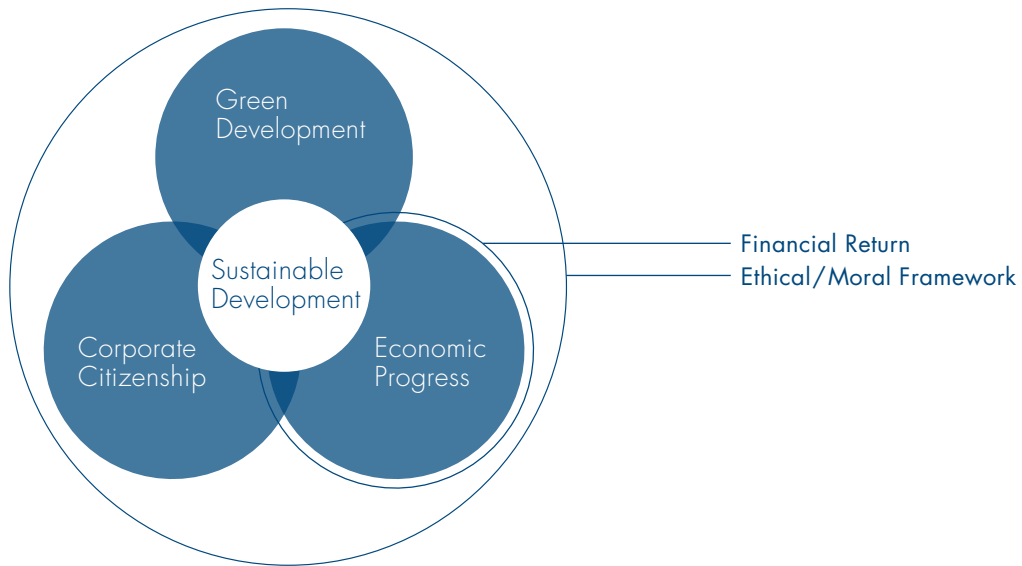
Protecting the environment, health and safety through our products has always been a hallmark of QIAGEN. No other company in life sciences has contributed more to the replacement of toxic elements in sample preparation procedures than QIAGEN. Today, our commitment to protect and preserve natural resources has expanded well beyond enhancing product safety. QIAGEN started corporate-wide initiatives to further systematically reduce the environmental impact which our business has across the board. These initiatives include:

- **Operational excellence:** QIAGEN has introduced the concept of QIAzen, a term created from the Japanese word KAIZEN, which means “continuous improvement.” By con-

stantly optimizing operational workflows throughout manufacturing and production, QIAGEN reduces transportation, saves electricity and minimizes other impacts on natural resources.

- **Energy savings:** QIAGEN runs simulations to reduce energy consumption and has installed sophisticated energy recovery and control systems to provide only the minimum of power required for operations. Activities for improving energy efficiency also encompass energy extractions from co-generators, better insulation of buildings, heat recovery and installation of intelligent building systems. Since 2003, a comprehensive process has helped facility managers to continuously identify potential savings opportunities, plan and monitor implementation. Use of power-friendly equipment, sustainable selection of suppliers and optimized operational hours contribute to a high level of energy efficiency.
- **Natural resources and waste reduction:** QIAGEN is a member of the Forest Stewardship Council and has a policy to select suppliers that comply with FSC standards for printing processes and sustainable paper production. Reducing printed material and providing more links to online tools is also a broad policy to support responsible paper production. QIAGEN has issued guidelines for suppliers requiring them to reduce packaging volumes by refraining from use of PVC and other potentially hazardous materials. In addition, QIAGEN has also performed an extensive inquiry into the company’s supply chain to ensure that no conflict minerals from the Democratic Republic of Congo or any of its adjoining countries are used in the company’s laboratory instruments. For packaging, QIAGEN uses biodegradable loose fill packaging made from 100% recycled polystyrene and has implemented a project to substantially reduce kit volumes by using less inserts and optimized design. Going forward, the company intends to implement a new program of cli-

[12] QIAGEN's Sustainability Approach



mate-neutral production of kit packaging. Finally, at most sites, waste reduction and recycling are standard business practices.

- **Transportation:** QIAGEN has placed some manufacturing machines at suppliers' sites to reduce transportation-related impacts on the environment. The company also actively encourages its employees to use public transportation more frequently. The pool of company cars is changed to ecological and CO2-efficient models in a continuous adjustment process. At most sites, video conferencing systems have been installed to allow virtual team meetings and reduce travel between sites.

## Economic Progress

Long-term business success is the outcome of the efficient use and sustained maintenance of all assets and resources we employ – financial or human capital, brand equity and corporate governance. All of these factors contribute to the long-term value proposition of the company for all of our stakeholders. Among others, initiatives and programs in this area include:

- **Training and retention:** QIAGEN views employee development as an integral success factor in creating lasting value for all of the company's stakeholders. Professional training and development is thus an ongoing process reaching all employees, which cycles from annual performance review and development discussion to training participation and learning transfer, and then back to an individual review. A

series of regional training programs are designed to create a work environment of employee empowerment and involvement in the business.

- **Business development:** QIAGEN rigorously follows a stringent business development process to address the fast growth opportunities in emerging regional markets and customer segments. The strategy includes acquisitions and collaborations to support strong organic growth and to drive future profitability.
- **Innovation management:** QIAGEN understands innovation as a comprehensive, multi-level process that is organized cross-departmentally and transparently, allowing for maximum planning and control. Innovation is continuously reviewed by outside teams of experts. Product development runs in seven steps from the initial idea to post-launch evaluation. At the same time, QIAGEN follows a global approach that calls on all employees to review processes and workflows continuously in order to identify all types of innovation potentials: product, market, business model and organizational ideas. A transparent internal communication culture and an award system for innovative behavior further support these endeavors.

## Corporate Citizenship

We believe it is our responsibility to provide all people universal and equal access to our healthcare solutions. This means facilitating access to our Sample to Insight solutions for people around the world. At the same time, we 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:** The company's 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 the company's products can play an important

role. While QIAGENcares includes a broad range of initiatives, QIAGEN has a strong commitment to fighting cervical cancer through testing for infections with the human papillomavirus (HPV) and has launched a donation program consisting of 1 million HPV tests to bring advanced cervical cancer screening to developing countries.

- **Local initiatives:** In recent years, QIAGEN has supported a broad range of local initiatives in several countries where the company's businesses are based. These range from sponsorship of health walks, music festivals, preschool science education, disease awareness campaigns, installation of school laboratories and promotion of biology in school curricula. At the same time, in select locations we have installed programs to mobilize employees to volunteer and provide company funds for projects that improve the lives of people in local and national communities.
- **Employee programs:** QIAGEN provides services and programs to help employees balance their personal lives with the company's dynamic work environment and stay healthy. The company offers in-house corporate child care, sabbatical programs, as well as 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/)

## Future Perspectives

### QIAGEN Perspectives for 2016

QIAGEN expects to accelerate growth and further innovation in 2016 and beyond with a broad offering of differentiated Sample to Insight solutions across the value chain of molecular testing. [13] Providing end-to-end solutions is a key competitive advantage in serving Molecular Diagnostics customers focused on clinical healthcare, as well as Life Sciences customers involved in academic research, pharmaceutical R&D, and applications such as human ID/forensics, veterinary diagnostics and food safety. Following a review of strategies to accelerate longer-term growth, QIAGEN plans to make incremental investments during 2016 to enhance the current portfolio. These involve plans to strengthen commercialization, including resources for the QuantiFERON-TB tests and the rollout of the GeneReader NGS System as well as e-commerce initiatives, investing in strategic areas such as NGS portfolio expansion and differentiated sample technologies, and driving geographic expansion. QIAGEN expects these investments to support further acceleration of the performance in 2017 and beyond.

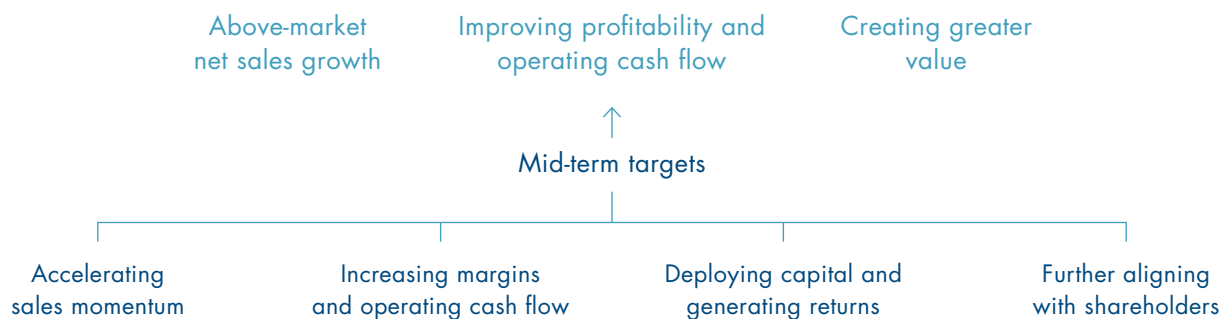
The focus is on adding to the momentum of a portfolio of growth drivers that continued to grow at a double-digit CER pace in 2015, providing about one-third of total sales. Adding to QIAGEN's long-standing leadership in innovative sample technologies, these growth drivers are: expanding the market for 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 with a growing menu of test content; and expanding QIAGEN's industry leadership in bioinformatics for clinical and other molecular applications.

Innovative sample technologies help laboratories obtain the highest-quality DNA and RNA for analysis, and QIAGEN further expanded its offering in 2015. Growth areas include technologies enabling minimally invasive "liquid biopsies" to unlock valuable molecular insights from body fluids such as blood, and technologies to analyze the impact of microbial diversity, a highly dynamic research field focused on the impact of microorganisms on human health and the environment. We will continue to add solutions addressing difficult front-end challenges in molecular testing, including growing fields such as personalized healthcare and next-generation sequencing.

The QuantiFERON-TB tests for latent tuberculosis infection maintained a 20% CER growth pace in 2015 and reached a milestone of more than seven million test delivered. The novel QuantiFERON technology has become the latent TB test of choice with high market shares around the world – including about 80% in Europe – and is displacing the century-old tuberculin skin test in proactive TB control efforts. QuantiFERON-TB Gold Plus, the fourth generation of this technology, gained momentum in 2015 after being cleared for sale in 30 European countries with a CE-IVD marking. QIAGEN expects to submit this fourth-generation test, which delivers even higher sensitivity and specificity in patients at greatest risk, for U.S. regulatory approval in 2016.

The initiative to drive next-generation sequencing in clinical research and diagnostics reached a milestone in 2015 with the start of commercialization for the GeneReader NGS System. The platform is the world's first complete Sample to Insight NGS solution designed for any laboratory to deliver actionable results, a simpler, more cost-effective way for clinical testing to take advantage of NGS technology. The new Actionable Insights Tumor Panel targeting 12 clinically actionable genes in five of the most prevalent cancers was introduced

[13] Our Ambition: Accelerating Innovation and Growth



with the GeneReader NGS System. Customer feedback has been positive, and commercialization will expand in 2016. QIAGEN's broad portfolio of "universal" consumables for NGS users, including the Enzymatics portfolio, serves an estimated 80% of all next-generation sequencing workflows.

In the growing market for personalized healthcare, QIAGEN continues to roll out novel companion diagnostics that enable treatment decisions based on individual patients' genomic information. Milestones in 2015 included the U.S. launch of a fourth FDA-approved companion diagnostic and the European launch of the first regulated companion diagnostic using liquid biopsies in lung cancer patients. Adding to its pipeline, QIAGEN signed a record number of partnerships in 2015 with pharma and biotech companies for co-development of companion diagnostics paired with targeted drugs. An industry-leading 15 master collaboration agreements continue to spawn assays using novel biomarkers and designed for a variety of platforms, including the QIASymphony, GeneReader NGS and Modaplex systems.

QIAGEN set a new goal of 1,750 cumulative placements of the QIASymphony system by year-end 2016 after surpassing

its 2015 target of more than 1,500 placements. The flexible QIASymphony platform offers customers Sample to Insight automation for medium-throughput molecular testing workflows. QIAGEN launched seven new CE-IVD tests in 2015, including the platform's first multiplex assay, the RespiFast RG Panel for upper respiratory tract infections, and also expanded its offering for U.S. human ID/forensics labs. The content menu continues to grow, enhancing the instruments' value as QIAGEN advances a pipeline of more than 30 assay projects.

The industry-leading QIAGEN bioinformatics portfolio delivered strong double-digit growth in 2015. Introduction of QIAGEN Clinical Insight (QCI) added a unique evidence-based clinical decision support solution that streamlines the annotation, interpretation and reporting of NGS results for clinical laboratories. Turning genomic data into actionable insights, QIAGEN software and database tools are gaining broader commercial presence through reseller agreements with large genomic service organizations. QIAGEN solutions also won a marquee customer in 2015 with expanded use by the U.S. Food and Drug Administration. QIAGEN continues to roll out new bioinformatics solutions meeting rapidly evolving needs in research and healthcare.

In 2015 QIAGEN faced its last year of significant headwinds from the U.S. market for cervical cancer screening with its *digene* HC2 HPV DNA Test. The test has maintained market leadership but has lost U.S. sales in recent years due to aggressive pricing actions by new competitors. While QIAGEN anticipates a further decline of U.S. HPV sales in 2016, the franchise represented only about 3% of total sales in 2015.

QIAGEN intends to continue to maximize the value of its broad portfolio of molecular technologies, instruments and bioinformatics by addressing growing customer needs with reliable, integrated Sample to Insight solutions.

## Global Economic Perspectives for 2016

The consensus outlook for the world's major economies is a continuation of moderate growth, amid regional variations and heightened uncertainties, after 2015 brought deceleration in some markets. Global GDP is forecast by the World Bank to grow 2.9% in 2016 and 3.1% in 2017, up from estimated growth of 2.4% in 2015. Factors stimulating economic growth include continued low interest rates, generally strong labor markets and consumer sectors, and low prices for oil and other commodities. On the other hand, analysts describe the ongoing recovery as fragile. Economic risks include volatility in financial markets and the possibility of a credit crisis; concerns about divergent monetary policies between the U.S., which began raising rates in late 2015, and the Euro Area and Japan, which have quantitative easing and some negative rates; China's slowdown of its rapid growth and rebalancing toward consumer-driven activity; and recessions in some commodity-exporting countries. Stronger economic growth would support growing demand in QIAGEN's business environment, but economic weakness or a downturn in some regions could undercut demand among customers.

## Industry Perspectives for 2016

Expanding applications for genomic insights and the move of molecular technologies into the mainstream of healthcare and other fields present opportunities for QIAGEN in 2016 and beyond. Healthcare providers are relying increasingly on molecular diagnostics to evaluate and monitor patients for cancer, infectious diseases and other conditions, taking advantage of the superior accuracy and speed of novel molecular tests compared to many traditional laboratory techniques. In Academia and the Pharma industry, genome-based studies are rapidly extending the knowledge of disease pathways and biomarkers, with potential to unlock new diagnostic and treatment possibilities. Clinical researchers increasingly use genomic testing to target patients and gather valuable data in trials. Applications in forensics, food safety and environmental research also are proliferating.

Molecular diagnostics is the most dynamic segment of the global *in vitro* diagnostics market and is expanding at a compound annual growth rate estimated in the high single-digits or low double-digits. Along with expanding technical capabilities, market trends are shaping the industry. Efficient, automated workflows and standardized test kits are adding scale and reducing costs. Reimbursement practices are evolving. In addition to centralized laboratories, hospitals are adopting on-site analysis of molecular tests for rapid, accurate results. NGS has begun moving from research into healthcare, a transition that requires easy-to-use technologies, clinical evidence for regulatory approvals, and bioinformatics to transform data into valuable insights.

## Subsequent Events

There were no events requiring disclosure.





# Corporate Governance

## Corporate Governance Report

- 096 Corporate Structure
- 097 Managing Board
- 099 Supervisory Board
- 108 Share Ownership
- 110 Additional Information

## Remuneration Report

- 116 Remuneration Policy
- 122 2015 Managing Board Remuneration
- 125 Future Development of the  
Remuneration Policy

---

# 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 at 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, 2015 and their ages as of January 31, 2016, are as follows: [1]

### [1] Managing Directors

Name	Age	Position
Peer M. Schatz	50	Managing Director, Chief Executive Officer
Roland Sackers	47	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**, 50, 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 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**, 47, 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 in Business Administration (Diplom-Kaufmann) from the 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 2015. 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 2015, 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, 2015 and their ages as of January 31, 2016, are as follows: [2]

[2] Supervisory Directors

Name <sup>1</sup>	Age	Position
Dr. Werner Brandt	62	Chairman of the Supervisory Board, Supervisory Director and Chairman of the Selection and Appointment Committee
Stéphane Bancel	43	Supervisory Director, Member of the Compensation Committee, Audit Committee and Science and Technology Committee
Dr. Metin Colpan	61	Supervisory Director, Chairman of the Science and Technology Committee and Member of the Selection and Appointment Committee
Prof. Dr. Manfred Karobath	75	Vice-Chairman of the Supervisory Board, Supervisory Director, Chairman of the Compensation Committee, Member of the Science and Technology Committee and Member of the Selection and Appointment Committee
Prof. Dr. Elaine Mardis	53	Supervisory Director and Member of the Science and Technology Committee
Lawrence A. Rosen	58	Supervisory Director and Chairman of the Audit Committee
Elizabeth E. Tallett	66	Supervisory Director, Member of the Audit Committee and Compensation Committee

1 Prof. James E. Bradner, M.D. was elected at the Company's Annual General Meeting in June 2015. He declared his resignation from the Supervisory Board as of December 31, 2015, after accepting a new position with Novartis AG.

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**, 43, joined the Supervisory Board as well as the Compensation Committee in 2013 and joined the Audit Committee and Science and Technology Committee in 2014. He is President and Founding 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. Werner Brandt**, 62, joined the Supervisory Board in 2007 and is Chairman of the Supervisory Board. He is 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 health-care 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. Dr. Brandt is 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. Metin Colpan**, 61, is a co-founder of QIAGEN and was the 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**, 75, has been a member of the Supervisory Board since 2000 and joined the Compensation Committee in 2005. He has served as a member of our Science and Technology Committee since 2014 and he is also a member 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. Elaine Mardis**, 53, joined the Supervisory Board and its Science and Technology Committee in 2014. Since 2014 she has served on the Scientific Advisory Board of Ingenuity Systems, Inc. Prof. Dr. Mardis holds over two

decades experience in DNA preparation and sequencing-based research. She is the Robert E. and Louise F. Dunn Distinguished Professor of Medicine at Washington University and also serves as Co-Director of its McDonnell Genome Institute where she has worked since 1993. Prof. Dr. Mardis serves on several study sections of the U.S. National Institutes of Health, is an editorial board member of *Molecular Cancer Research*, *Annals of Oncology*, and *Disease Models and Mechanisms* and acts as a reviewer for *Nature* and *The New England Journal of Medicine*. Prof. Dr. Mardis also serves on the scientific advisory boards of QIAGEN Silicon Valley (formerly Ingenuity) and Regeneron Genomics Center. Between 2008 and 2009 she served on the board of directors of Applied Biosystems, Inc. Prof. Dr. Mardis is also Professor in the Department of Genetics, with an adjunct appointment in the Department of Molecular Microbiology at Washington University. Prior to joining the Washington University faculty, she was a senior research scientist at Bio-Rad Laboratories in Hercules, California. Prof. Dr. Mardis received her Bachelor of Science in Zoology in 1984 and her Ph.D. in Chemistry and Biochemistry in 1989 from the University of Oklahoma.

**Lawrence A. Rosen**, 58, joined the Supervisory Board as well as the Audit Committee in 2013 and has served as the committee's chairman since 2014. Mr. Rosen is a member of the Board of Management and Chief Financial Officer of Deutsche Post DHL. Holding this position since 2009, Mr. Rosen is 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**, 66, joined the Supervisory Board as well as the Audit Committee and Compensation Committee in 2011. 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 will continue 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.

**Professor James E. Bradner**, M.D., 43, was selected as a member of the Supervisory Board as of January 2015, and was elected at the Annual General Meeting in June 2015. Dr. Bradner is Associate Director of the Center for the Science of Therapeutics (CSofT) at the Broad Institute where he has worked since 2004, as well as an attending physician in the Department of Hematology-Oncology at the Dana-Farber Cancer Institute. Among other roles, he also serves as an Associate Professor of Medicine at Harvard Medical School. He is a founder of Acetylon Pharmaceuticals, SHAPE Pharmaceuticals, Tensha Therapeutics, and Syros Pharmaceuticals. Dr. Bradner received his A.B. in Biochemistry from Harvard University in 1994 and his M.D. from The University of Chicago in 1999. Dr. Bradner resigned from the Supervisory Board effective December 31, 2015, after accepting a new position with Novartis AG.

## 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 2015, 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 composition of the committees is outlined in table [3].

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.



**[3] Supervisory Board Committees**

As of December 31, 2015

Name of Supervisory Director	Independent	Member of audit Committee	Member of compensation committee	Member of selection and appointment committee	Member of science and technology committee
Dr. Werner Brandt	•			•	
Stéphane Bancel	•	•	•		•
Prof. Dr. Elaine Mardis	•				•
Dr. Metin Colpan	•			•	•
Prof. Dr. Manfred Karobath	•		•	•	•
Lawrence A. Rosen	•	•			
Elizabeth E. Tallett	•	•	•		

## 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 complaint procedures, including confidential, anonymous submission by employees of concerns, for the receipt, retention and treatment of complaints 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 eight times in 2015 and met with the external auditor excluding members of the Managing Board in July 2015. 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, Professor Karobath (Chairman), Ms. Tallett and Mr. Bancel. Members are appointed by the Supervisory Board and serve for a term of one year. The Compensation Committee met four times in 2015.

## 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 Dr. Brandt (Chairman), Dr. Colpan and Professor Karobath. Members are appointed by the Supervisory Board and serve for a one-year term. The Selection and Appointment Committee met three times in 2015.

## 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. Metin Colpan (Chairman), Professor Manfred Karobath, Stéphane Bancel and Professor Elaine Mardis and formerly Professor James Bradner. Members are appointed by the Supervisory Board and serve for a term of one year. The Science and Technology Committee met four times in 2015.

## 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 2015 consisted of a fixed salary and variable components, with the significant majority of compensation awarded in the form of QIAGEN share 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.

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. The financial targets for vesting of the new Performance Stock Units are 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 new steering metric that measures the ability of QIAGEN to generate returns and exceed its cost of capital.

In 2014, the General Meeting of Shareholders approved a new remuneration policy for the Managing Board which states that future annual regular equity-based compensation

grants to members of the Managing Board shall 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.

For the year ended December 31, 2015, the Managing Board members received the following compensation: [4]

#### [4] Managing Board

Name	Fixed Salary	Variable Cash Bonus <sup>1</sup>	Other <sup>2</sup>	Total	Defined Contribution Benefit Plan	Performance Stock Units
Peer M. Schatz	\$ 1,149,000	90,000	10,000	\$ 1,249,000	\$ 72,000	378,811
Roland Sackers	\$ 500,000	49,000	50,000	\$ 599,000	\$ 74,000	105,654

- 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.

#### 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 2015 consists of fixed retainer compensation and additional retainer amounts for Chairman and Vice Chairman. Annual remuneration of the Supervisory Board members is as follows: [5]

#### [5] Annual Remuneration of the Supervisory Board

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
<b>Additional compensation payable to members holding the following positions:</b>	
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.

For the year ended December 31, 2015, the Supervisory Board members received the following compensation: [6]

#### [6] Annual Remuneration of Individual Supervisory Board Members

Name	Fixed remuneration	Chairman/ vice chairman committee	Committee membership	Total <sup>2</sup>	Restricted stock units
<b>Supervisory Board<sup>1</sup></b>					
Stéphane Bancel	\$ 57,500	—	32,000	\$ 89,500	11,241
Dr. James E. Bradner	\$ 52,708	—	5,500	\$ 58,208	—
Dr. Werner Brandt	\$ 150,000	12,000	—	\$ 162,000	11,241
Dr. Metin Colpan	\$ 57,500	12,000	3,000	\$ 72,500	11,241
Prof. Dr. Manfred Karobath	\$ 90,000	18,000	12,000	\$ 120,000	11,241
Prof. Dr. Elaine Mardis	\$ 57,500	—	6,000	\$ 63,500	11,241
Lawrence A. Rosen	\$ 57,500	25,000	—	\$ 82,500	11,241
Elizabeth E. Tallett	\$ 57,500	—	26,000	\$ 83,500	11,241

1 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.

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.

# Share Ownership

Table [7] 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.

## [7] Ownership Common Shares

Name and country of residence	Shares beneficially owned <sup>1</sup>	
	Number <sup>2</sup>	Percent ownership
Peer M. Schatz, Germany	2,128,664 <sup>3</sup>	0.91 %
Roland Sackers, Germany	20,000 <sup>4</sup>	*
Stéphane Bancel, United States	—	—
Dr. Werner Brandt, Germany	22,427 <sup>5</sup>	*
Dr. Metin Colpan, Germany	3,655,951 <sup>6</sup>	1.57 %
Prof. Dr. Manfred Karobath, Austria	15,683 <sup>7</sup>	*
Prof. Dr. Elaine Mardis, United States	—	—
Lawrence A. Rosen, Germany	—	—
Elizabeth Tallett, United States	2,524 <sup>8</sup>	*

\* Indicates that the person beneficially owns less than 0.5% of the Common Shares issued and outstanding as of January 31, 2016.

1 The number of Common Shares outstanding as of January 31, 2016 was 233,049,238. 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, 2016. 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 845,709 shares issuable upon the exercise of options now exercisable or that could become exercisable within 60 days from the date of this table having exercise prices ranging from \$ 15.59 to \$ 22.43 per share. Options expire in increments during the period between 2/2017 and 2/2023.

4 Does not include 196,121 shares issuable upon the exercise of options now exercisable or that could become exercisable within 60 days from the date of this table having exercise prices ranging from \$ 15.59 to \$ 22.43 per share. Options expire in increments during the period between 2/2018 and 2/2023. Does not include 118,018 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 7,893 shares issuable upon the exercise of options now exercisable or that could become exercisable within 60 days from the date of this table having exercise prices ranging from \$ 15.59 to \$ 22.43 per share. Options expire in increments during the period between 4/2018 and 2/2022. Does not include 6,335 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 or that could become exercisable within 60 days from the date of this table having exercise prices ranging from \$ 15.59 to \$ 22.43 per share. Options expire in increments during the period between 4/2017 and 2/2022. Includes 2,847,025 shares held by CC Verwaltungs GmbH, of which Dr. Colpan is the sole stockholder and 800,000 shares held by Colpan GbR. Does not include 6,335 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 or that could become exercisable within 60 days from the date of this table having exercise prices ranging from \$ 15.59 to \$ 22.43 per share. Options expire in increments during the period between 4/2017 and 2/2022. Does not include 6,335 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 1,563 shares issuable upon the exercise of options now exercisable or that could become exercisable within 60 days from the date of this table having exercise prices of \$ 15.59 per share. Options expire on 2/2022. 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.

Table [8] sets forth the vested and unvested options and stock awards of our officers and directors as of January 31, 2016:

**[8] Vested and Unvested Stock Options and Common Shares**

Name <sup>1</sup>	Total vested options	Total unvested options	Expiration dates	Exercise prices	Total Unreleased Restricted and Performance Stock Units
Peer M. Schatz	799,756	45,953	2/28/2017 to 2/28/2023	\$ 15.59 to \$ 22.43	2,659,594
Roland Sackers	181,661	14,460	2/28/2018 to 2/28/2023	\$ 15.59 to \$ 22.43	725,218
Stéphane Bancel	—	—	—	—	21,241
Dr. Werner Brandt	7,893	—	4/29/2018 to 2/28/2022	\$ 15.59 to \$ 22.43	41,373
Dr. Metin Colpan	9,835	—	4/25/2017 to 2/28/2022	\$ 15.59 to \$ 22.43	41,911
Prof. Dr. Manfred Karobath	9,835	—	4/25/2017 to 2/28/2022	\$ 15.59 to \$ 22.43	41,911
Prof. Dr. Elaine Mardis	—	—	—	—	11,241
Lawrence A. Rosen	—	—	—	—	21,241
Elizabeth E. Tallett	1,563	—	2/28/2022	\$ 15.59	37,242

<sup>1</sup> 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.

## 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 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.

### 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. 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 Plan, subject to certain anti-dilution 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.

In connection with the acquisition of Digene Corporation during the third quarter of 2007, the Company assumed three additional equity incentive plans and exchanged Digene stock options and awards into the Company's Common Shares. No new grants will be made under these plans.

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, 2016, there were 1.8 million options outstanding with exercise prices ranging between \$ 13.44 and \$ 23.54 and expiring between October 26, 2016 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 8.9 million stock unit awards outstanding as of January 31, 2016. These awards will be released between February 28, 2016 and February 27, 2025. As of January 31, 2016, options to purchase 1.1 million Common Shares and 3.6 million stock

unit awards were held by the officers and directors of QIAGEN, as a group.

## 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, a majority 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 registered public accounting firm 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 2015, KPMG NV was appointed as external auditor for the Company for 2015.

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 was last amended on December 10, 2008, and can be found at [www.commissiecorporategovernance.nl](http://www.commissiecorporategovernance.nl).

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.*

In the past, members of our Managing Board were granted options to acquire common shares at an exercise price higher than the market price on the grant date (as determined by reference to an organized trading market or association). Our view is that the “challenging target” has been set at the time of granting the options since the holder cannot realize any value from these options unless the price of our common shares has risen above the exercise price. On June 25, 2014 the Annual General Meeting approved amendments to the remuneration policy of the Managing Board which state that grants of stock options and restricted stock units which are based on time vesting only 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 2015.

*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.*

Members of the Managing Board are granted restricted stock units and performance stock units from time to time. Restricted stock units represent rights to receive common shares at a future date. The number of granted restricted stock units is dependent upon the achievement of pre-defined performance goals. Restricted stock units are structured so that 40% of a grant vests after three years, 50% after five years and the remaining 10% after ten years. Performance stock units have performance conditions in addition to time-vesting.

*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 of Prof. Karobath beyond the 12-year term as recommended by the Dutch Code.

*6. 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.

*7. 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.

# Remuneration Report

We are pleased to present our Remuneration Report for the 2015 financial year.

This report builds on the Remuneration Policy which was significantly updated in 2014 and adopted by the Annual General Meeting of Shareholders. The changes made were designed to further optimize the alignment of the remuneration of the Managing Board with long-term shareholder interests and to reflect changes to market trends, best practices and benchmarks since 2005 which was when the prior version of the Remuneration Policy had been adopted by our shareholders.

# Remuneration Policy

The objective of the Remuneration Policy is to attract, retain and reward the most talented, highly qualified leaders and experts to enable QIAGEN to achieve its strategic initiatives and operational excellence. The Policy aligns remuneration to reward individual performance as well as those of QIAGEN, and to foster sustainable growth and value creation.

The Remuneration Policy is based on a group of principles:

- Aligned with business strategy and shareholder interests
- Measured against specific corporate performance metrics
- Supported by a “pay for performance” culture that rewards sustainable results
- Competitive against remuneration offered by relevant peers
- Consistent, fair and transparent
- Tailored to QIAGEN’s risk profile
- Ensures social responsibility
- Compliant with regulatory standards and local legislative requirements

## Market Competitiveness

The Remuneration Policy and overall remuneration levels offered by QIAGEN are benchmarked regularly against a select peer group of companies and key markets in which QIAGEN operates to ensure overall competitiveness. QIAGEN participates in various compensation benchmarking surveys in which companies provide information on the level, as well as the structure, of compensation awarded for a broad range of positions around the world.

QIAGEN has established a peer group of companies for its own benchmarking. [9] These companies have been selected on the basis of market capitalization, competitors for talent, similar complexity and international activities, and from those

operating in similar industries. This peer group consists of European and U.S.-based companies due to the international scope of QIAGEN’s activities, providing a balanced mix in the Life Sciences, Diagnostics and Pharmaceuticals industries and designed to mitigate the risk of inadvertently losing employees.

### [9] Benchmarking Peer Companies

Europe	United States
Actelion Pharmaceuticals	C.R. Bard
H.Lundbeck	Cepheid
Ipsen	Charles River Laboratories
Jazz Pharmaceuticals	Genomic Health
Lonza	Hologic
Meda Pharmaceuticals	Hospira
Merck KGaA	IDEXX
Mettler Toledo	Illumina
Novozymes	Meridian
Orion Oyi	Myriad Genetics
Shire Pharmaceuticals	PerkinElmer
UCB	Sigma-Aldrich
	Thermo Fisher
	Waters

QIAGEN aims for total direct compensation levels to be at the market median levels for comparable positions in the relevant markets, and as benchmarked against the peer group.

In 2015, QIAGEN hired the independent compensation consulting firm HKP to review and benchmark the Remuneration Policy and compensation levels against relevant markets and peer group companies. QIAGEN’s policies were generally seen to be well designed, and various proposals were made to further develop remuneration systems.

## Supervisory Board Evaluation

The Supervisory Board evaluates the Remuneration Policy on a routine basis to review its efficiency and effectiveness in supporting QIAGEN's long-term strategy against relevant market practices, and makes adjustments if and when appropriate. On an annual basis, the Supervisory Board sets the performance targets for the members of the Managing Board, reviews their performance against these predetermined targets and determines the remuneration and benefits in line with contractual terms.

The Supervisory Board ensures that the remuneration of the Managing Board members incentivizes the right behaviors desired for the sustainable success of QIAGEN while also providing the members with fair and attractive remuneration packages. Furthermore, the Supervisory Board performs an analysis of the possible outcomes of the variable remuneration components and how they may affect remuneration of the Managing Board members. Through its statutory power, the Supervisory Board has the right to adjust the remuneration packages of the members of the Managing Board when it decides that this is appropriate, and that such actions would safeguard business continuity and would be in the best interests of all stakeholders.

The Compensation Committee advises the Supervisory Board and prepares resolutions with respect to the review and execution of the Remuneration Policy as adopted by the General Meeting of Shareholders on June 25, 2014. In case of policy changes, the Supervisory Board submits the proposals to the General Meeting of Shareholders for adoption.

## Managing Board Remuneration

Remuneration of Managing Board members consists of a combination of base salary, short-term variable cash award and elements of long-term incentives. In addition, the members of the Managing Board can receive a pension arrangement and other benefits in line with market practices.

The total target remuneration package of the Managing Board members is appropriately set in consideration with a variety of factors that include external benchmarks and the manager's experience as well as the complexity of the position, scope and areas of responsibilities.

QIAGEN aims to provide the members of the Managing Board with total direct compensation at a median level with market benchmarks.

The structure of the remuneration package for the Managing Board members is designed to balance incentives for short-term operational performance with incentives for long-term sustainable value creation while taking into account the interests of shareholders and other stakeholders. This means that a significant portion of total remuneration consists of variable awards, which can differ substantially from year to year and depend on the achievement of corporate goals as well as individual performance.

The Remuneration Policy for the Managing Board is generally aligned and consistent with the framework for remuneration of other senior managers of QIAGEN. The various elements of the remuneration package are set out in more detail below.

### Base Salary

While the primary focus is on the level of the total compensation, QIAGEN aims to provide a base salary at competitive levels to its members of the Managing Board. Base salary levels are reviewed annually against overall market trends as

well as with benchmarks from a selected group of companies. Adjustments can also be made by the Supervisory Board to compensate for inflation as well as changes in roles and responsibilities.

### Variable Remuneration

To ensure that remuneration is linked to performance, a significant portion of remuneration to the members of the Managing Board is variable and contingent upon the performance of the individual and the Company. These goals are set annually at ambitious levels to motivate and drive performance, with a focus on achieving both long-term strategic initiatives as well as short-term objectives based on annual operational plans.

Variable remuneration consists of a short-term variable cash award and long-term incentive awards. Failure to achieve certain threshold levels of performance results in no payout being made for short-term incentives and reduced outcomes for long-term incentives.

The performance assessment of the Managing Board as a whole can extend beyond the date that variable remuneration awards are made and can continue as part of a multi-year framework. In this way, a longer-term horizon is established that ensures variable remuneration continues to remain “at risk” and that Managing Board members remain fully aligned with the interest of shareholders and other stakeholders.

### Short-Term Incentives

Short-term incentives consist of an annual variable cash bonus award that is based upon the achievement of predetermined annual targets. This award has two components: [10] (a) overall financial performance (weighted at 75 %); and (b) the individual’s performance (weighted at 25%). The overall financial performance is based on both corporate financial as well as defined operational or strategic milestones (called “Team Goals”) which are shared by all employees. The financial goals include elements related to short-term financial results that include net sales, operating income and free cash flow.

The Team Goals are a set of annual cross-functional goals aimed at achieving QIAGEN’s strategy focused on innovation and sustainable value creation with an emphasis on increasing growth, efficiency, engagement and improving customer experience.

QIAGEN does not disclose the quantitative and specific targets since these are considered to be sensitive information. However, we have outlined below the target areas and their weightings.

#### [10] Short-term Incentive Structure

Performance criteria	Weighting
<b>Corporate financial goals</b>	<b>50%</b>
Net sales	
Operating income, adjusted	
Free cash flow, adjusted	
<b>Team goals</b>	<b>25%</b>
Accelerate organic growth	
Actively enhance growth through acquisitions	
Deliver efficiency and effectiveness	
Increase value of QIAGEN as employer of choice	
Enhance customer experience	
<b>Personal goals</b>	<b>25%</b>

The weighting of the quantitative criteria, but also the emphasis of specific drivers of these criteria may change with the strategic priorities in any given year.

For the Chief Executive Officer the target annual short-term variable cash bonus is set at 52.9% of the annual base salary and the maximum is equivalent to 86.8% of the annual base salary. The Chief Financial Officer has a target annual short-term variable cash bonus set at 41.2% with the maximum being equivalent to 62.8% of the annual fixed salary.



The weighted performance spread for the corporate financial goals is 100% at budget and capped at 200%. Team Goals are capped at 110% and individual goals at 100%. In the event that financial goals are not achieved, the members of the Managing Board are not eligible for a short-term variable cash bonus pay out.

The principles of the short-term variable cash bonus, with different weights for performance measures and different levels of target bonuses, are applicable to all employees worldwide.

### Long-Term Incentives

On June 25, 2014 the Annual General Meeting of Shareholders approved significant changes to the Remuneration Policy in view of equity based compensation. Long-term equity-based compensation (also referred to as “Long Term Incentives” or “LTIs”) grants to members of the Managing Board under the new 2014 Stock Plan which was also approved by our shareholders in June 2014, shall primarily consist of an award of PSUs, i.e. long-term incentive awards which are subject to performance criteria.

The number of PSUs to be granted as annual equity based remuneration to the members of the Managing Board will be determined on an individual basis by the Supervisory Board, taking into account a variety of factors that include the Managing Director’s performance and experience, external benchmarks, as well as the complexity of the position and the scope and areas of his or her responsibility, consistent with the framework for remuneration of other senior managers of the Company and in alignment with the intended long-term retention of our top management. In any event, the value (depreciated due to factors such as risk of forfeiture and the Company’s failure to achieve its long-term initiatives, and the length of the vesting terms) of the regular annual long-term incentive awards shall not be greater than 300% of the value of the annual fixed salary for each Managing Board member. The number of PSUs to be earned pursuant to the grants to the members of the Managing Board will be subject to the achievement of challenging performance goals. 90% of each award shall be based on absolute financial performance

measures and 10% of each award shall be based on relative performance targets. An overachievement of a performance goal will result in an increase in the number of performance stock units earned on a scale which is capped at 120% of the total award. Conversely, an underachievement will result in a decrease in the number of performance stock units earned. No performance stock units will be earned in the event that the Company’s adjusted EBIT is negative for the year of the grant.

Absolute performance measures shall consist of the following key financial indicators: [11]

#### [11] Key Financial Performance Indicators

Performance Measure/Key Financial Indicator	Contribution to the annual performance stock unit award
Net Sales	40%
Operating Income*	40%
Free Cash Flow*	10%

\* Adjusted for extraordinary effects as publicly disclosed in the Company’s public filings

The absolute figures of these key financial indicators will each be derived from the Company’s annual budget and aligned with the annual bonus plan. The Supervisory Board shall be authorized to set other comparable key financial indicators with a different weight to reflect changes from the current strategy and goals of the Company. In the event that less than 100% of one of the above stated key financial indicators is achieved, the corresponding number of performance stock units will be reduced accordingly, e.g. a 90% achievement of the stated Net Sales figure will lead to a 10% reduction of the number of PSUs earned based on the achievement of such figure.

The relative performance target shall be the share price performance of the Company, measured at the end of each calendar year against the share price performance of an index developed from a selected peer group representing a balanced mix of U.S. and European companies in the industries in which we operate.

QIAGEN's practice has been increasingly focused on granting a major part of variable remuneration in equity-based compensation instruments. This ensures that Managing Board members have interests strongly aligned with long-term shareholders.

## QIAGEN Commitment Program

In 2013, the "QIAGEN Commitment Program" was launched for members of the Managing Board and a select group of senior managers with the establishment of goals for the years 2014–2016 that must be achieved in line with QIAGEN's five-year business plan. Equity instruments were granted in 2013 that have specific vesting requirements related to these goals but the program is in fact a performance-based compensation system for the years 2014–2016.

The QIAGEN Commitment Program combines grants of long-term incentives linked to achievement of financial goals as defined in QIAGEN's 5-year business plan with a mandatory minimum share ownership program.

### Commitment Performance Share Units

The program's PSU instruments ("Commitment PSUs") are directly linked to the achievement of financial milestones as defined in QIAGEN's 5-year business plan.

The performance triggers for Commitment PSUs are defined by financial milestones as outlined in QIAGEN's 5-year business plan and based on the plan's targets after the third full calendar year.

The respective hurdles for vesting have been approved by the Supervisory Board and include *Net Sales*, *EBIT* and *QIAGEN Value Added* targets.

QIAGEN Value Added is QIAGEN's profit measurement defined as net operation income profit after tax less a capital charge.

Commitment PSUs for members of the Managing Board vest over three (40%), five (50%) and ten years (10%).

### Mandatory Share Holding

Included in QIAGEN's Commitment Program and as a condition of eligibility for the Commitment PSU awards, is a mandatory minimum shareholding requirement.

Upon vesting of the Commitment PSUs, the CEO is required to hold QIAGEN shares that correspond to an equivalent of 2x base salary and the CFO to an equivalent of 1.5x base salary. Failure to maintain mandatory holding of shares will result into immediate cancellation of the Commitment PSUs and may result in reduction of other long-term incentive awards.

The Chief Executive Officer already owns 2.13 million (0.91%) and the Chief Financial Officer owns 20,000 QIAGEN shares.

### Pensions

Members of the Managing Board participate in a defined contribution benefit plan. The target retirement age under the plan is 65. The participant and employer both contribute to the plan. The participant is entitled to a one-time pension payment upon retirement. In the event that the Managing Director's service should be terminated prior to age 65, the employee-financed portion of the pension expectancy will fall to the employee while the employer-financed portion will be due to the employee only if the termination occurs after the fifth anniversary of participation in the plan.

### Loans

Members of the Managing Board have not been provided with any loans.

### Other Benefits

In addition to the remuneration described above, other benefits may be provided to members of the Management Board. These include customary benefits such as insurances, company vehicles and legal and tax assistance.

## Employment Contracts

The employment contracts of the members of the Managing Board are determined by the Supervisory Board and are built to comply with the framework of the Remuneration Policy. The employment contracts are set in accordance with Dutch law. Due to the holding company nature of the legal entity QIAGEN N.V., the members of the Managing Board are in addition employed by foreign QIAGEN affiliates. The employment agreements with the Managing Directors and the Company's German affiliate include a new 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. The Dutch employment agreements are the basis for the "comply or explain" comparisons to the provisions of the Dutch Corporate Governance Code (hereinafter the "Code") which includes a number of non-mandatory principles and provisions. To the extent the provisions, policies or other do not apply, the Company explains and gives reasons for their non-application. QIAGEN is concordant with almost all of the Code principles and provisions and intends to adhere to the highest standards at all time.

### Term of Employment

The employment contracts of existing members of the Managing Board have been entered for an indefinite period of time. No arrangements for early retirement of the Managing Board members are offered.

Members of the Managing Board are appointed annually by the General Meeting of shareholders.

### Notice Period and Severance

The employment contracts of Managing Board members end by notice of either party. The notice period by a Managing Board member is subject to a term of three months. The notice period by the Company is subject to a six-month term. The members of the Managing Board have additional employment agreements with other QIAGEN affiliates in jurisdictions out-

side the Netherlands that have notice periods deviating from terms in the employment agreements with QIAGEN N.V. 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, whereas the Code recommends as severance, in the case of dismissal, a maximum sum equivalent to one year of salary or when it is manifestly unreasonable, during the first term of office, two times the annual salary. QIAGEN believes that its current contractual arrangements are well justified due to the long tenures of the Managing Board members. The Supervisory Board will provide best efforts to ensure that failure and poor performance is not rewarded in the event of a termination.

### Change in Control

In the event of the sale or the transfer of all or substantially all of the Company's assets or business to an acquirer in one or several transactions, including a merger, consolidation or a transfer of shares to a third party (a "Transaction"), the members of the Managing Board are entitled to a change of control payment commensurate to a multiple (for Peer M. Schatz 5, for Roland Sackers 3) of annual salary (fixed payment plus annual bonus, includes salaries and bonuses set forth in employment agreements with other QIAGEN affiliates). Further, stock options, RSUs and PSUs that are granted to the members of the Managing Board, would be subject to an accelerated vesting in case of a Transaction.

### Clawback Provisions

The Supervisory Board has the right to recover variable remuneration from members of the Managing Board on the basis of its statutory powers.

### New Hires

The terms and conditions of employment for new members of the Managing Board will adhere to their full extent, where sensible, with the Code and to the Bill on Management and Supervision that was enacted on January 1, 2013.

# 2015 Managing Board Remuneration

The remuneration of the members of the Managing Board for 2015 was determined in accordance with the Remuneration Policy as approved by the Annual General Meeting of Shareholders in June 2014.

## Base Salary

Table [12] sets forth 2015 base salary levels for the Managing Board members<sup>1</sup>.

[12] Base Salary

	2015
Peer M. Schatz	\$ 1,149,000
Roland Sackers	\$ 500,000

<sup>1</sup> All salary figures at YTD average rate EUR/USD 1,1101

## Short-Term Incentives

The assessment of the performance of the Managing Board resulted in the pay out of an annual variable cash award as presented in the table [13].

[13] Variable Annual Cash Award

	Annual cash bonus
Peer M. Schatz	\$ 90,000
Roland Sackers	\$ 49,000

## Long-Term Incentives

Based on the performance of the individual member of the Managing Board and taking into account total compensation levels relative to markets, the members of the Managing Board have been granted long-term incentive awards for the financial year 2015.

Size and value of the awards granted to members of the Managing Board are in line with industry practice and comparable awards granted by our peers to their senior executives.

Table [14] shows the long-term incentive awards granted to the individual Managing Board member for the financial year 2015.

[14] Long-term Incentives Granted in 2015

	PSUs granted
Peer M. Schatz	378,811
Roland Sackers	105,654

Table [15] sets forth the vested and unvested options and stock awards of our officers and directors as of January 31, 2016:

[15] Options and Stock Awards

Name	Total Vested Options	Total Unvested Options	Expiration Dates	Exercise Prices	Total Unvested Restricted and Performance Stock Units
Peer M. Schatz	799,756	45,953	2/28/2017 to 2/28/2023	\$ 15.59 to \$ 22.43	2,659,594
Roland Sackers	181,661	14,460	2/28/2018 to 2/28/2023	\$ 15.59 to \$ 22.43	725,218

Stock options and restricted stock units which are based on time vesting only were granted to the members of the Managing Board under the QIAGEN N.V. Amended and Restated 2005 Stock Plan which expired in 2015. Going forward, the equity based compensation the Managing Board shall primarily consist of grants of PSUs. Stock Options and restricted stock units shall be reserved for use as special equity incentive rewards in certain situations.

## Pensions

During 2015, approximately \$ 146,000 was accrued by QIAGEN to provide pension benefits to the members of the Managing Board.

## Other benefits

The members of the Managing Board received other emoluments equivalent to a total sum of \$ 60,000 in addition to the compensation and pension benefit. These may include costs related to insurance, company vehicles, tax assistance, travel and relocation costs.

## 2015 Compensation Overview

Table [16] states the amounts earned on an accrual basis by our Managing Board members in 2015.

**[16] 2015 Compensation Overview** Year Ended December 31, 2015

	Peer M. Schatz	Roland Sackers
<b>\$ 1,000 except for number of award grants</b>		
Fixed Salary	1,149	500
Other <sup>2</sup>	10	50
Total fixed income 2015	1,159	550
Short-term variable cash bonus <sup>1</sup>	90	49
Total short-term income 2015	1,249	599
Defined contribution on benefit plan	72	74
Number of performance stock units granted 2015	378,811	105,654
Related recognized compensation expense	1,458	407

- 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.

The total recognized compensation expense in accordance with IFRS 2 in the year 2015 (2014) for 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 \$ 6.2 million (\$ 10.7 million) for Mr. Schatz and \$ 1.9 million (\$ 3.4 million) for Mr. Sackers.

Based on such valuations the total compensation including recognized compensation expenses in the year 2015 (2014) for members of the Managing Board was \$ 10.1 million (\$ 17.1 million), and amounts to \$ 7.5 million (\$ 12.7 million) for Mr. Schatz and \$ 2.6 million (\$ 4.4 million) for Mr. Sackers. Total non-periodical remuneration according to Dutch Civil Code included in total compensation was \$ 2.0 million (\$ 3.0 million) and amounts \$ 1.5 million (\$ 2.3 million) for Mr. Schatz and \$ 0.5 million (\$ 0.7 million) for Mr. Sackers.

## Future Development of the Remuneration Policy

The Supervisory Board annually reviews the Company's remuneration practices to ensure they remain aligned with business demands, shareholder interests and developments among peer companies.

The Remuneration Policy will be updated with further adjustments to further maximize the commitment and the vested interest in QIAGEN of its senior executives. It aims to further simplify QIAGEN's long-term incentive practice and foster remuneration for long-term sustainable economic and shareholder value creation, alignment of the interests of the senior executives with those of shareholders and to ensure retention.





# Financial Results

128 Consolidated Financial Statements

136 Notes to the Consolidated Financial Statements

196 Auditor's Report

# Financial Results

## [1] Consolidated Balance Sheets: Assets

As of December 31

\$ 1,000	Note	2015	2014
<b>Assets</b>			
<b>Current assets:</b>			
Cash and cash equivalents	(3)	290,011	392,667
Short-term investments	(7)	130,817	184,036
Accounts receivable, net of allowance for doubtful accounts of \$7,255 and \$8,847 in 2015 and 2014, respectively	(3)	273,853	265,231
Income taxes receivable		26,940	29,312
Inventories, net	(3)	136,586	132,276
Prepaid expenses and other current assets	(8)	70,339	113,771
Deferred income taxes	(16)	33,068	31,457
<b>Total current assets</b>		<b>961,614</b>	<b>1,148,750</b>
<b>Long-term assets:</b>			
Property, plant and equipment, net of accumulated depreciation of \$409,634 and \$392,563 in 2015 and 2014, respectively	(9)	442,944	428,093
Goodwill	(11)	1,875,698	1,887,963
Intangible assets, net of accumulated amortization of \$827,084 and \$726,273 in 2015 and 2014, respectively	(11)	636,421	726,914
Deferred income taxes	(16)	2,036	4,298
Other long-term assets (of which \$7,472 in 2015 due from related parties)	(10) (13) (22)	270,965	258,354
<b>Total long-term assets</b>		<b>3,228,064</b>	<b>3,305,622</b>
<b>Total assets</b>		<b>4,189,678</b>	<b>4,454,372</b>

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

## [2] Consolidated Balance Sheets: Liabilities and Equity

As of December 31

\$ 1,000, except par value	Note	2015	2014
Liabilities and equity			
<b>Current liabilities:</b>			
Current portion of long-term debt (of which \$ 130,451 in 2014 due to related parties)	(15)	—	131,119
Accounts payable		52,306	46,124
Accrued and other liabilities (of which \$ 3,884 in 2014 due to related parties)	(12) (22)	192,069	224,203
Income taxes payable		21,515	28,935
Deferred income taxes	(16)	2,463	1,245
Total current liabilities		268,353	431,626
<b>Long-term liabilities:</b>			
Long-term debt, net of current portion	(15) (22)	1,059,587	1,040,960
Deferred income taxes	(16)	75,726	117,264
Other liabilities	(13)	224,058	206,523
Total long-term liabilities		1,359,371	1,364,747
Commitments and contingencies	(19)		
<b>Equity:</b>			
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 2015 and 2014		2,812	2,812
Additional paid-in capital		1,741,167	1,823,171
Retained earnings		1,227,509	1,125,686
Accumulated other comprehensive loss	(17)	(259,156)	(134,735)
Less treasury shares, at cost – 6,702 and 7,684 shares in 2015 and 2014, respectively	(17)	(152,412)	(167,190)
Equity attributable to the owners of QIAGEN N.V.		2,559,920	2,649,744
Noncontrolling interest		2,034	8,255
Total equity		2,561,954	2,657,999
<b>Total liabilities and equity</b>		<b>4,189,678</b>	<b>4,454,372</b>

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

[3] Consolidated Statements of Income

Years Ended December 31

	Note	2015	2014	2013
<b>\$ 1,000, except per share data</b>				
Net sales	(3)	1,280,986	1,344,777	1,301,984
Cost of sales		454,611	479,839	486,494
Gross profit		826,375	864,938	815,490
<b>Operating expenses:</b>				
Research and development	(3)	147,180	163,627	146,070
Sales and marketing		360,962	376,873	371,523
General and administrative, restructuring, integration and other	(3) (6)	103,874	126,550	199,072
Acquisition-related intangible amortization		38,666	37,070	35,495
Total operating expenses		650,682	704,120	752,160
Income from operations		175,693	160,818	63,330
<b>Other income (expense):</b>				
Interest income		4,753	3,964	2,299
Interest expense		(37,396)	(39,330)	(30,882)
Other (expense) income, net		(10,552)	(6,938)	2,591
Total other expense, net		(43,195)	(42,304)	(25,992)
Income before income taxes		132,498	118,514	37,338
Income taxes	(3) (16)	5,641	1,312	(31,760)
Net income		126,857	117,202	69,098
Net (loss) income attributable to noncontrolling interest		(246)	568	25
<b>Net income attributable to the owners of QIAGEN N.V.</b>		<b>127,103</b>	<b>116,634</b>	<b>69,073</b>
<b>Basic net income per common share attributable to the owners of QIAGEN N.V.</b>		<b>0.54</b>	<b>0.50</b>	<b>0.30</b>
<b>Diluted net income per common share attributable to the owners of QIAGEN N.V.</b>		<b>0.54</b>	<b>0.48</b>	<b>0.29</b>
<b>Weighted-average common shares outstanding</b>				
Basic	(18)	233,483	232,644	234,000
Diluted	(18)	237,158	241,538	242,175

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

[4] Consolidated Statements of Comprehensive Income (Loss)		Years Ended December 31		
\$ 1,000	Note	2015	2014	2013
Net income		126,857	117,202	69,098
Other comprehensive income (loss) to be reclassified to profit or loss in subsequent periods:				
Gains on cash flow hedges, before tax	(13)	5,337	—	—
Reclassification adjustments on cash flow hedges, before tax	(13)	(5,273)	—	—
Cash flow hedges, before tax		64	—	—
Gains on marketable securities, before tax		1,215	—	—
(Losses) gains on pensions, before tax		(1,809)	(687)	117
Foreign currency translation adjustments, before tax		(124,639)	(131,326)	(45,807)
Other comprehensive loss, before tax		(125,169)	(132,013)	(45,690)
Income tax relating to components of other comprehensive loss		1,140	(57)	(2,151)
Total other comprehensive loss, after tax		(124,029)	(132,070)	(47,841)
Comprehensive income (loss)		2,828	(14,868)	21,257
Comprehensive (income) loss attributable to noncontrolling interest		(146)	959	(367)
<b>Comprehensive income (loss) attributable to the owners of QIAGEN N.V.</b>		<b>2,682</b>	<b>(13,909)</b>	<b>20,890</b>

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

[5] Consolidated Statements of Changes in Equity

	Note	Common shares		Additional paid-in capital	Retained earnings
		Shares	Amount		
<b>\$ 1,000, except number of shares</b>					
<b>Balance at December 31, 2012</b>		236,487	2,769	1,718,163	985,434
Acquisition of QIAGEN Marseille S.A. shares from noncontrolling interests		—	—	—	—
Net income		—	—	—	69,073
Unrealized gain, net on pension	(17)	—	—	—	—
Translation adjustment, net	(17)	—	—	—	—
Purchase of treasury shares	(17)	—	—	—	—
Common stock issuances under employee stock plans	(20)	3,220	43	20,301	(76)
Excess tax benefit of employee stock plans		—	—	433	—
Share-based compensation	(20)	—	—	37,935	—
Proceeds from subscription receivables		—	—	1,062	—
<b>Balance at December 31, 2013</b>		239,707	2,812	1,777,894	1,054,431
Acquisition of QIAGEN Marseille S.A. shares from noncontrolling interests		—	—	—	—
Net income		—	—	—	116,634
Issuance of warrants	(17)	—	—	68,900	—
Unrealized loss, net on pension	(17)	—	—	—	—
Translation adjustment, net	(17)	—	—	—	—
Purchase of treasury shares	(17)	—	—	—	—
Issuance of common shares in connection with warrant exercise	(15)	—	—	—	(12,115)
Issuance of common shares in connection with stock plan	(20)	—	—	—	(33,264)
Excess tax benefit of employee stock plans		—	—	1,596	—
Share-based compensation	(20)	—	—	42,188	—
Proceeds from subscription receivables		—	—	536	—
Redemption of subscription receivables	(15)	—	—	(67,943)	—
<b>Balance at December 31, 2014</b>		239,707	2,812	1,823,171	1,125,686
Acquisition of QIAGEN Marseille S.A. shares from noncontrolling interests		—	—	—	—
Net income		—	—	—	127,103
Unrealized loss, net on pension	(17)	—	—	—	—
Unrealized gain, net on hedging contracts	(13)	—	—	—	—
Realized gain, net on hedging contracts	(13)	—	—	—	—
Unrealized gain, net on marketable securities	(10)	—	—	—	—
Translation adjustment, net	(17)	—	—	—	—
Purchase of treasury shares	(17)	—	—	—	—
Issuance of common shares in connection with stock plan	(20)	—	—	—	(25,280)
Excess tax benefit of employee stock plans		—	—	3,328	—
Share-based compensation	(20)	—	—	27,566	—
Proceeds from subscription receivables		—	—	97	—
Redemption of subscription receivables	(15)	—	—	(112,995)	—
<b>Balance at December 31, 2015</b>		239,707	2,812	1,741,167	1,227,509

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

	Accumulated other comprehensive income (loss)	Treasury shares		Equity attributable to the owners of QIAGEN N.V.	Non-controlling interest	Total equity
		Shares	Amount			
	43,991	(1,943)	(35,653)	2,714,704	9,659	2,724,363
	—	—	—	—	(487)	(487)
	—	—	—	69,073	25	69,098
	82	—	—	82	—	82
	(48,265)	—	—	(48,265)	342	(47,923)
	—	(4,149)	(86,029)	(86,029)	—	(86,029)
	—	275	5,069	25,337	—	25,337
	—	—	—	433	—	433
	—	—	—	37,935	—	37,935
	—	—	—	1,062	—	1,062
	(4,192)	(5,817)	(116,613)	2,714,332	9,539	2,723,871
	—	—	—	—	(325)	(325)
	—	—	—	116,634	568	117,202
	—	—	—	68,900	—	68,900
	(481)	—	—	(481)	—	(481)
	(130,062)	—	—	(130,062)	(1,527)	(131,589)
	—	(5,558)	(126,889)	(126,889)	—	(126,889)
	—	1,373	30,917	18,802	—	18,802
	—	2,318	45,395	12,131	—	12,131
	—	—	—	1,596	—	1,596
	—	—	—	42,188	—	42,188
	—	—	—	536	—	536
	—	—	—	(67,943)	—	(67,943)
	(134,735)	(7,684)	(167,190)	2,649,744	8,255	2,657,999
	—	—	—	—	(6,367)	(6,367)
	—	—	—	127,103	(246)	126,857
	(1,266)	—	—	(1,266)	—	(1,266)
	4,003	—	—	4,003	—	4,003
	(3,955)	—	—	(3,955)	—	(3,955)
	1,215	—	—	1,215	—	1,215
	(124,418)	—	—	(124,418)	392	(124,026)
	—	(842)	(20,818)	(20,818)	—	(20,818)
	—	1,824	35,596	10,316	—	10,316
	—	—	—	3,328	—	3,328
	—	—	—	27,566	—	27,566
	—	—	—	97	—	97
	—	—	—	(112,995)	—	(112,995)
	<b>(259,156)</b>	<b>(6,702)</b>	<b>(152,412)</b>	<b>2,559,920</b>	<b>2,034</b>	<b>2,561,954</b>

## [6] Consolidated Statements of Cash Flows

Years Ended December 31

\$ 1,000	Note	2015	2014	2013
<b>Cash flows from operating activities:</b>				
Net income		126,857	117,202	69,098
Adjustments to reconcile net income to net cash provided by operating activities, net of effects of businesses acquired:				
Depreciation and amortization		191,473	200,782	199,355
Non-cash impairments		5,471	34,297	42,768
Amortization of debt discount and issuance costs		19,955	15,392	—
Share-based compensation expense	(20)	27,565	42,188	37,935
Excess tax benefits from share-based compensation		(3,328)	(1,596)	(3,130)
Deferred income taxes	(16)	(37,194)	(41,291)	(68,086)
Loss on early redemption of debt	(15)	7,564	4,560	—
Loss on marketable securities		6,039	3,914	—
Changes in fair value of contingent consideration	(14)	(5,225)	(1,165)	(11,127)
Other items, net including fair value changes in derivatives		2,609	(7,509)	(13,611)
Net changes in operating assets and liabilities:				
Accounts receivable	(3)	(24,764)	(16,561)	(14,921)
Inventories	(3)	(33,194)	(41,792)	(17,499)
Prepaid expenses and other	(8)	52,315	(2,273)	(7,923)
Other long-term assets		2,730	(13,090)	257
Accounts payable		7,732	(5,495)	(6,793)
Accrued and other liabilities	(12)	(25,570)	(21,482)	24,655
Income taxes	(16)	(88)	16,034	23,829
Other long-term liabilities		(3,450)	5,850	4,150
Net cash provided by operating activities		317,497	287,965	258,957
<b>Cash flows from investing activities:</b>				
Purchases of property, plant and equipment		(97,778)	(86,591)	(84,468)
Proceeds from sale of equipment		103	35	44
Purchases of intangible assets		(19,703)	(10,412)	(34,225)
Purchases of investments		(6,053)	(9,426)	(4,319)
Purchases of short-term investments	(7)	(317,570)	(420,158)	(20,346)
Proceeds from sales of short-term investments	(7)	367,714	275,779	63,146
Cash paid for acquisitions, net of cash acquired	(5)	(66,930)	(160,436)	(170,546)
Other investing activities		(5,983)	3,608	(1,021)
Net cash used in investing activities		(146,200)	(407,601)	(251,735)



## [6] Consolidated Statements of Cash Flows (continued)

Years Ended December 31

\$ 1,000	Note	2015	2014	2013
<b>Cash flows from financing activities:</b>				
Purchase of call option related to cash convertible notes	(15)	—	(105,170)	—
Proceeds from issuance of warrants, net of issuance costs	(17)	—	68,900	—
Net repayment/proceeds from short-term debt	(15)	—	—	(1,451)
Net proceeds from issuance of cash convertible notes and cash paid for issuance costs	(15)	(86)	716,967	13
Repayment of long-term debt	(15)	(251,868)	(387,050)	(2,285)
Principal payments on capital leases		(1,079)	(4,579)	(4,215)
Proceeds from subscription receivables		97	536	1,062
Excess tax benefits from share-based compensation		3,328	1,596	3,130
Proceeds from issuance of common shares		10,316	12,131	25,337
Purchase of treasury shares	(17)	(20,818)	(126,889)	(86,029)
Other financing activities		1,497	16,401	(4,321)
Net cash (used in) provided by financing activities		(258,613)	192,843	(68,759)
Effect of exchange rate changes on cash and cash equivalents		(15,340)	(10,843)	(2,197)
Net (decrease) increase in cash and cash equivalents		(102,656)	62,364	(63,734)
Cash and cash equivalents, beginning of period		392,667	330,303	394,037
<b>Cash and cash equivalents, end of period</b>		<b>290,011</b>	<b>392,667</b>	<b>330,303</b>
<b>Supplemental cash flow disclosures:</b>				
Cash paid for interest		20,799	24,052	31,000
Cash paid for income taxes		34,441	12,539	14,518
<b>Supplemental disclosure of non-cash investing and financing activities:</b>				
Equipment purchased through capital lease		231	342	449
Intangible assets acquired in non-monetary exchange		5,900	—	—

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

---

# Notes to the Consolidated Financial Statements December 31, 2015

## 1. Corporate Information and Basis of Presentation

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 U.S. generally accepted accounting principles (GAAP) 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 instruments that have been measured at fair value.

Certain reclassifications of prior year amounts have been made to conform to the current year presentation in Note 16 "Income Taxes." Additionally, for the year ended December 31, 2014, the amounts related to the amortization of debt issuance costs and loss on marketable securities have been reclassified from other items, net and are now stated separately in the consolidated statements of cash flows. These reclassifications had no effect on cash provided by operating activities or total cash flows.

On November 20, 2015, we acquired MO BIO Laboratories, located in Carlsbad, California. On December 16, 2014 we acquired Enzymatics, located in Beverly, Massachusetts and on April 3, 2014, we acquired BIOBASE, located in Wolfenbüttel, Germany. On August 22, 2013 we acquired CLC bio located in Aarhus, Denmark and on April 29, 2013, we acquired Ingenuity Systems, Inc. (Ingenuity), located in Redwood City, 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.

## 2. Effects of New Accounting Pronouncements

### Adoption of New Accounting Standards

In April 2014, the FASB issued Accounting Standards Update No. 2014-08 (ASU 2014-08), *Presentation of Financial Statements (Topic 205) and Property, Plant and Equipment (Topic 360): Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity*, which raises the threshold for a disposal to qualify as a discontinued operation and requires new disclosures of both discontinued operations and certain other disposals that do not meet the definition of a discontinued operation. The ASU is aimed at reducing the frequency of disposals reported as discontinued operations by focusing on strategic shifts that have or will have a major impact on an entity's operations and financial results. For public entities, the amendments are effective on a prospective basis for all disposals of components of an entity and all businesses that, on acquisition, are classified as held for sale that occur within annual periods beginning on or after December 15, 2014 and interim period within those years. ASU 2014-08 became effective for us in the period beginning January 1, 2015 and its adoption did not have an effect on our financial position, results of operations or cash flows.

### New Accounting Standards Not Yet Adopted

In January 2016, the FASB issued Accounting Standards Update No. 2016-01 (ASU 2016-01), *Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*. The new guidance is intended to improve the recognition and measurement of financial instruments. The new guidance makes targeted improvements to existing U.S. GAAP by:

- Requiring equity investments (except those accounted for under the equity method of accounting, or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income;
- Requiring public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes;
- Requiring separate presentation of financial assets and financial liabilities by measurement category and form of financial asset (i.e., securities or loans and receivables) on the balance sheet or the accompanying notes to the financial statements;
- Eliminating the requirement to disclose the fair value of financial instruments measured at amortized cost for organizations that are not public business entities;
- Eliminating the requirement for public business entities to disclose the method(s) and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost on the balance sheet; and
- Requiring a reporting organization to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk (also referred to as "own credit") when the organization has elected to measure the liability at fair value in accordance with the fair value option for financial instruments.

---

The amendments are effective for our financial statements beginning in the first quarter of 2018. We are currently evaluating the impact of ASU 2016-01 on our consolidated financial statements.

In November 2015, the FASB issued Accounting Standard Update No. 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes*, which changes how deferred taxes are classified on organizations' balance sheets. The ASU eliminates the current requirement for organizations to present deferred tax liabilities and assets as current and noncurrent in a classified balance sheet. Instead, organizations will be required to classify all deferred tax assets and liabilities as noncurrent. The amendments are effective for our financial statements and we will adopt beginning in the first quarter of 2017. As of December 31, 2015, we have current deferred tax assets of \$33.1 million and current deferred tax liabilities of \$2.5 million. We do not expect the adoption to have a material impact on our consolidated financial statements.

In September 2015, the FASB issued Accounting Standards Update No. 2015-16, *Business Combinations (Topic 805): Simplifying the Accounting for Measurement-Period Adjustments*. To simplify the accounting for adjustments made to provisional amounts recognized in a business combination, the amendments eliminate the requirement to retrospectively account for those adjustments. The amendments require that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined. The amendments require that the acquirer record, in the same period's financial statements, the effect on earnings of changes in depreciation, amortization, or other income effects, if any, as a result of the change to the provisional amounts, calculated as if the accounting had been completed at the acquisition date. The amendments are effective for our financial statements beginning in the first quarter of 2016. We do not expect the adoption to have a material impact on our consolidated financial statements.

In July 2015, the FASB issued Accounting Standards Update No. 2015-11 (ASU 2015-11), *Inventory: (Topic 330): Simplifying the Measurement of Inventory* requiring in scope inventory, including inventory measured using first-in, first out (FIFO) or average cost, to be measured at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. ASU 2015-11 is effective for us beginning in the first quarter of 2017. We are currently evaluating the impact of ASU 2015-11 on our consolidated financial statements.

In April 2015, the FASB issued Accounting Standards Update No. 2015-05 (ASU 2015-05), *Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40): Customer's Accounting for Fees Paid in a Cloud Computing Arrangement*. This amendment provides guidance to help entities determine whether a cloud computing arrangement contains a software license that should be accounted for as internal-use software or as a service contract. ASU 2015-05 is effective for our financial statements beginning in the first quarter of 2016. We do not expect the adoption to have a material impact on our consolidated financial statements.

In April 2015, the FASB issued Accounting Standards Update No. 2015-03 (ASU 2015-03) *Interest: Imputation of Interest (Subtopic 835-30)* requiring that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability. ASU 2015-03 does not address presentation or subsequent measurement of debt issuance costs related to line-of-credit arrangements. The FASB has issued Accounting Standards Update No. 2015-15, *Interest – Imputation of Interest (Subtopic 835-30): Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements – Amendments to SEC Paragraphs Pursuant to Staff Announcement at June 18, 2015 EITF Meeting*. This ASU adds SEC paragraphs pursuant to the SEC Staff Announcement at the June 18, 2015, Emerging Issues Task Force meeting about the presentation and subsequent measurement of debt issuance costs associated with line-of-credit arrangements. Given the absence of authoritative guidance within ASU 2015-03 for debt issuance costs related to line-of-credit arrangements, the SEC staff would not object to an entity deferring and presenting debt issuance costs as an asset and subsequently amortizing the deferred debt issuance costs ratably over the term of the line-of-credit arrangement, regardless of whether there are any outstanding borrowings on the line-of-credit arrangement. ASU 2015-03 will be effective for us beginning in the first quarter of 2016 and shall be applied on a retrospective basis wherein the balance sheet of each individual period presented shall be adjusted to reflect the period-specific effects of applying the new guidance. As of December 31, 2015, we have deferred debt issuance costs of \$0.7 million and \$12.2 million recorded in other current and other long-term assets, respectively. We do not expect the adoption to have a material impact on our consolidated financial statements.

In February 2015, the FASB issued Accounting Standards Update No. 2015-02 (ASU 2015-02) *Consolidation (Topic 810): Amendments to the Consolidation Analysis*. The new standard modifies current guidance on consolidation under the variable interest model and the voting model. ASU 2015-02 will be effective for us beginning in the first quarter of 2016. We are currently evaluating the impact of ASU 2015-02 on our consolidated financial statements.

In May 2014, the FASB issued Accounting Standards Update No. 2014-09 (ASU 2014-09), *Revenue from Contracts with Customers: (Topic 606)* which affects any entity that either enters into contracts with customers to transfer goods or services or enters into contracts for the transfer of nonfinancial assets unless those contracts are within the scope of other standards (e.g., insurance contracts or lease contracts). This ASU will supersede the revenue recognition requirements in Topic 605, *Revenue Recognition*, and most industry-specific guidance. This ASU also supersedes some cost guidance included in Subtopic 605-35, *Revenue Recognition-Construction-Type and Production-Type Contracts*. In addition, the existing requirements for the recognition of a gain or loss on the transfer of nonfinancial assets that are not in a contract with a customer (e.g., assets within the scope of Topic 360, *Property, Plant, and Equipment*, and intangible assets within the scope of Topic 350, *Intangibles-Goodwill and Other*) are amended to be consistent with the guidance on recognition and measurement (including the constraint on revenue) in this ASU. An entity should apply the amendments in this ASU either retrospectively to each prior reporting period presented and the entity may elect certain practical expedients; or, retrospectively with

---

the cumulative effect of initially applying this ASU recognized at the date of initial application. In August 2015, the FASB issued Accounting Standards Update No. 2015-14, *Revenue from Contracts with Customers: (Topic 606): Deferral of the Effective Date* which defers the effective date of ASU 2014-09 to interim and annual reporting periods beginning after December 15, 2017. Early adoption is permitted only as of interim and annual reporting periods beginning after December 15, 2016. We are currently evaluating the impact its adoption would have on our financial position, results of operations or cash flows.

### 3. Summary of Significant Accounting Policies and Critical Accounting Estimates

#### Principles of Consolidation

The consolidated financial statements include the accounts of QIAGEN N.V. and its wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated. Investments in either common stock or in-substance common stock of companies where we exercise significant influence over the operations but do not have control, and where we are not the primary beneficiary, are accounted for using the equity method. All other investments are accounted for under the cost method. When there is a portion of equity in an acquired subsidiary not attributable, directly or indirectly, to the Company, we record the fair value of the noncontrolling interests at the acquisition date and classify the amounts attributable to noncontrolling interests separately in equity in the consolidated financial statements. Any subsequent changes in the Company's ownership interest while the Company retains its controlling financial interest in its subsidiary are accounted for as equity transactions.

#### Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and disclosure of contingencies at the date of the financial statements as well as the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### Concentrations of Risk

We buy materials for products from many suppliers, and are not dependent on any one supplier or group of suppliers for the business as a whole. However, key components of certain products, including certain instrumentation components and chemicals, are available only from a single source. If supplies from these vendors were delayed or interrupted for any reason, we may not be able to obtain these materials timely or in sufficient quantities in order to produce certain products and sales levels could be negatively affected. Additionally, 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

researchers and their organizations for applications in which our products are used could have a significant effect on the demand for our products.

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. 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 master agreements which allow us to manage the exposure with the respective counterparty on a net basis.

Other financial instruments that potentially subject us to concentrations of credit risk are cash and cash equivalents, short-term investments, and accounts receivable. We attempt to minimize the risks related to cash and cash equivalents and short-term investments 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.

### Foreign Currency Translation

Our reporting currency is the U.S. dollar and our subsidiaries' functional currencies are generally the local currency of the respective 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 equity at historical rates. Translation gains or losses are recorded in equity, and transaction gains and losses are reflected in net income as a component of other income (expense), net. Realized gains or losses on the value of derivative contracts entered into to hedge the exchange rate exposure of receivables and payables are also included in net income as a component of other income (expense), net. The net (loss) gain on foreign currency transactions in 2015, 2014 and 2013 was \$(0.5) million, \$ 1.9 million, and \$ 5.6 million, respectively, and is included in other income (expense), net.

The exchange rates of key currencies were as follows:

**[7] Exchange Rates for Key Currencies**

(\$ equivalent for one)	Closing rate at December 31,		Annual average rate		
	2015	2014	2015	2014	2013
Euro (EUR)	1.0887	1.2141	1.1100	1.3287	1.3281
Pound Sterling (GBP)	1.4833	1.5587	1.5286	1.6474	1.5642
Swiss Franc (CHF)	1.0048	1.0097	1.0406	1.0938	1.0791
Australian Dollar (AUD)	0.7308	0.8187	0.7522	0.9025	0.9683
Canadian Dollar (CAD)	0.7202	0.8633	0.7836	0.9059	0.9710
Japanese Yen (JPY)	0.0083	0.0084	0.0083	0.0095	0.0103
Chinese Yuan (CNY)	0.1542	0.1611	0.1592	0.1623	0.1626

**Segment Information**

We determined that we operate as one operating segment in accordance with the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 280, Segment Reporting. 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 reporting unit.

**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%–83% 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 \$3.0 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 4%–8% of our net sales. Revenue from SaaS arrangements has increased following our 2013 acquisition of Ingenuity discussed in Note 5, and 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) in accordance with ASC 605-25, *Revenue Recognition – Multiple-Element Arrangements* 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 accounted for under ASC 605-25, *Revenue Recognition – Multiple-Element Arrangements*. Multiple-element arrangements 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, both of the following criteria must be met:

- The delivered items have value to the client on a stand-alone basis;
- If the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item or 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) vendor-specific objective evidence (VSOE) of selling price, if it exists; or otherwise (b) third-party evidence of selling price. If neither VSOE 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 revenues and costs are deferred until the period or periods in which the final deliverable is provided.

Deliverables in our multiple-element arrangements include instrumentation equipment, installation, training, extended warranty services or product maintenance contracts or consumable products. 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 VSOE, 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. VSOE 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. VSOE 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 other arrangements do not include any provisions for cancellation or refunds.

## Warranty

We provide warranties on our products against defects in materials and workmanship 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 accrued and other liabilities in the accompanying consolidated balance sheets. The changes in the carrying amount of warranty obligations are as follows:

### [8] Change in Carrying Amount of Warranty Obligations

	Total
<b>\$ 1,000</b>	
<b>Balance at December 31, 2013</b>	4,936
Provision charged to cost of sales	2,766
Usage	(3,504)
Adjustments to previously provided warranties, net	(695)
Currency translation	(224)
<b>Balance at December 31, 2014</b>	3,279
Provision charged to cost of sales	2,202
Usage	(2,569)
Adjustments to previously provided warranties, net	(91)
Currency translation	(184)
<b>Balance at December 31, 2015</b>	<b>2,637</b>

## Research and Development

Research and product development costs are expensed as incurred. Research and development expenses consist primarily of salaries and related expenses, facility costs and amounts paid to contract research organizations, and laboratories for the provision of services and materials as well as costs for internal use or clinical trials.

## 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 balance sheet. When the grant relates to an asset, the nominal amount of the grant is deducted from the carrying amount of the asset and recognized over the same period that the related asset is depreciated.

### 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.

### 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, 2015, 2014 and 2013, shipping and handling costs totaled \$26.2 million, \$26.8 million and \$23.3 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, 2015, 2014 and 2013 were \$7.2 million, \$7.0 million and \$7.6 million, respectively.

### General and Administrative, Restructuring, 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 include personnel costs (principally termination benefits), facility closure and contract termination costs. Termination benefits are accounted for in accordance with FASB ASC Topic 712, *Compensation – Nonretirement Postemployment Benefits*, and 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, some termination benefits and other costs are accounted for in accordance with FASB ASC Topic 420, *Exit or Disposal Cost Obligations* and 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.

## Income Taxes

We account for income taxes under the liability method. Under this method, total income tax expense is the amount of income taxes expected to be payable for the current year plus the change from the beginning of the year for deferred income tax assets and liabilities established for the expected further tax consequences resulting from differences in the financial reporting and tax basis of assets and liabilities. Deferred tax assets and/or liabilities are determined by multiplying the differences between the financial reporting and tax reporting bases for assets and liabilities by the enacted tax rates expected to be in effect when such differences are recovered or settled. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date.

Tax benefits are initially recognized in the financial statements when it is more likely than not that the position will be sustained upon examination by the tax authorities. Such tax positions are initially and subsequently measured as the largest amount of tax benefit that is greater than 50 percent likely of being realized upon settlement with the taxing authority using the cumulative probability method, assuming the tax authority has full knowledge of the position and all relevant facts. Our policy is to recognize interest accrued related to unrecognized tax benefits in interest expense and penalties within the income tax provision.

## Derivative Instruments

We enter into derivative financial instrument contracts to minimize the variability of cash flows or income statement impact associated with the anticipated transactions being hedged or to hedge fluctuating interest rates. As changes in foreign currency or interest rate impact the value of anticipated transactions, the fair value of the forward or swap contracts also changes, offsetting foreign currency or interest rate fluctuations. Derivative instruments are recorded on the balance sheet at fair value. Changes in fair value of derivatives are recorded in current earnings or other comprehensive income, depending on whether a derivative is designated as part of a hedge transaction.

## Share-Based Payments

Compensation cost for all share-based payments is recorded based on the grant date fair value, less an estimate for pre-vesting forfeitures, recognized in expense over the service period.

- *Stock Options:* We utilize the Black-Scholes-Merton valuation model for estimating the fair value of our stock options granted. 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. These assumptions include the risk-free rate of interest, expected dividend yield, expected volatility, expected life of the award and forfeiture rate.
- *Risk-Free Interest Rate:* This is the average U.S. Treasury rate (having a term that most closely resembles the expected life of the option) at the date the option was granted.

- *Dividend Yield:* We have never declared or paid dividends on our common stock and do not anticipate declaring or paying any dividends in the foreseeable future.
- *Expected Volatility:* Volatility is a measure of the amount by which a financial variable such as a share price has fluctuated (historical volatility) or is expected to fluctuate (expected volatility) during a period. We use a combination of the historical volatility of our stock price and the implied volatility of market-traded options of our stock to estimate the expected volatility assumption input to the Black-Scholes-Merton model. Our decision to use a combination of historical and implied volatility is based upon the availability of actively traded options of our stock and our assessment that such a combination is more representative of future expected stock price trends.
- *Expected Life of the Option:* This is the period of time that the options granted are expected to remain outstanding. We estimated the expected life by considering the historical exercise behavior. We use an even exercise methodology, which assumes that all vested, outstanding options are exercised uniformly over the balance of their contractual life.
- *Forfeiture Rate:* This is the estimated percentage of options granted that are expected to be forfeited or cancelled on an annual basis before becoming fully vested. We estimated the forfeiture rate based on historical forfeiture experience.
- *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 of restricted and performance stock units 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.

## 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.

### [9] Cash and Cash Equivalents

As of December 31

\$ 1,000	2015	2014
Cash at bank and on hand	217,644	260,830
Short-term bank deposits	72,367	131,837
<b>Cash and cash equivalents</b>	<b>290,011</b>	<b>392,667</b>

### Short-Term Investments

Short-term investments are classified as “available for sale” and stated at fair value in the accompanying balance sheet. Interest income is accrued when earned and changes in fair market values are reflected as unrealized gains and losses, calculated on the specific identification method, as a component of accumulated other comprehensive income. The amortization of premiums and accretion of discounts to maturity arising from acquisition is included in interest income. A decline in fair value that is judged to be other-than-temporary is accounted for as a realized loss and the write-down is included in the consolidated statements of income. Realized gains and losses, determined on a specific identification basis, on the sale of short-term investments are included in income.

### Fair Value of Financial Instruments

The carrying amount of cash and cash equivalents, notes receivable, accounts receivable, accounts payable and accrued liabilities approximate their fair values because of the short maturities of those instruments. The carrying value of our variable rate debt and capital leases approximates their fair values because of the short maturities and/or interest rates which are comparable to those available to us on similar terms. The fair values of the Cash Convertible Notes are based on an estimation using available over-the-counter market information. The fair values of the Private Placement Senior Notes totaling \$400.0 million issued in October 2012 and further described in Note 15 were estimated using the changes in the U.S. Treasury rates. The fair values of the notes payable to QIAGEN Finance, further discussed in Note 15, were estimated by using available over-the-counter market information on the convertible bonds which were issued by QIAGEN Finance, the values of which correlate to the fair value of the loan arrangements we had with QIAGEN Finance which include the notes payable, the guarantee and the warrant agreement (further discussed in Note 10).

### Accounts Receivable

Our accounts receivable are unsecured and we are at risk to the extent such amounts become uncollectible. We continually monitor accounts receivable balances, and provide for an allowance for doubtful accounts at the time collection becomes questionable based on payment history or age of the receivable. Amounts determined to be uncollectible are written off against the reserve. For the years ended December 31, 2015, 2014 and 2013, write-offs of accounts receivable totaled \$2.0 million, \$2.3 million and \$1.5 million, respectively, while provisions for doubtful accounts which were charged to expense totaled \$2.1 million, \$1.4 million and \$6.9 million, respectively. For all years presented, no single customer represented more than ten percent of accounts receivable or consolidated net sales.

## Inventories

Inventories are stated at the lower of cost, determined on a first-in, first-out basis, or market and include material, capitalized labor and overhead costs. Inventories consisted of the following as of December 31, 2015 and 2014:

[10] Inventories	As of December 31	
\$ 1,000	2015	2014
Raw materials	27,051	24,781
Work in process	21,066	22,489
Finished goods	88,469	85,006
<b>Total inventories, net</b>	<b>136,586</b>	<b>132,276</b>

## Property, Plant and Equipment

Property, plant and equipment, including equipment acquired under capital lease obligations, are stated at cost less accumulated amortization. Capitalized internal-use software costs include only those direct costs associated with the actual development or acquisition of computer software for internal use, including costs associated with the design, coding, installation and testing of the system. Costs associated with preliminary development, such as the evaluation and selection of alternatives, as well as training, maintenance and support are expensed as incurred. Costs for software to be sold, leased or otherwise marketed that are related to the conceptual formulation and design are expensed as incurred. Costs incurred to produce the product after technological feasibility is established are capitalized and amortized in accordance with the accounting standards for the costs of software to be sold, leased, or otherwise marketed. All other depreciation is computed using the straight-line method over the estimated useful lives of the assets (3 to 40 years). Amortization of leasehold improvements is computed on a straight-line basis over the lesser of the remaining life of the lease or the estimated useful life of the improvement asset. We have a policy of capitalizing expenditures that materially increase assets' useful lives and charging ordinary maintenance and repairs to operations as incurred. When property or equipment is disposed of, the cost and related accumulated depreciation and amortization are removed from the accounts and any gain or loss is included in earnings.

## Acquired Intangibles and Goodwill

Acquired intangibles with alternative future uses are carried at cost less accumulated amortization and consist of licenses to technology held by third parties and other acquired intangible assets. Amortization is computed over the estimated useful life of the underlying patents, which has historically ranged from one to twenty years. Purchased intangible assets acquired in business combinations, other than goodwill, are amortized over their estimated useful lives unless these lives are determined to be indefinite. Intangibles are assessed for recoverability considering the contract life and the period of time over which the intangible will contribute to future cash



flow. The unamortized cost of intangible assets, where cash flows are independent and identifiable from other assets, is evaluated periodically and adjusted, if necessary, if events and circumstances indicate that a decline in value below the carrying amount has occurred. In 2015, we recorded intangible asset impairment of \$0.2 million related to the abandonment of certain projects. For the years ended December 31, 2014 and 2013, we recorded intangible asset impairments of \$8.7 million and \$19.7 million, respectively, as discussed in Note 6.

Amortization expense related to developed technology and patent and license rights which have been acquired in a business combination is included in cost of sales. Amortization of trademarks, customer base and non-compete agreements which have been acquired in a business combination is recorded in operating expense under the caption 'acquisition-related intangible amortization'. Amortization expenses of intangible assets not acquired in a business combination are recorded within either the cost of sales, research and development or sales and marketing line items based on the use of the asset.

The estimated fair values of acquired in-process research and development projects which have not reached technological feasibility at the date of acquisition are capitalized and subsequently tested for impairment through completion of the development process, at which point the capitalized amounts are amortized over their estimated useful life. If a project is abandoned rather than completed, all capitalized amounts are written-off immediately.

Goodwill represents the difference between the purchase price and the estimated fair value of the net assets acquired arising from business combinations. Goodwill is subject to impairment tests annually or earlier if indicators of potential impairment exist, using a fair-value-based approach. We have elected to perform our annual test for indications of impairment as of October 1st of each year. Following the annual impairment tests for the years ended December 31, 2015, 2014 and 2013, goodwill has not been impaired.

## Investments

We have investments in non-marketable securities issued by privately held companies. These investments are included in other long-term assets in the accompanying consolidated balance sheets and are accounted for using the equity or cost method of accounting.

Investments are evaluated periodically, or when impairment indicators are noted, to determine if declines in value are other-than-temporary. In making that determination, we consider all available evidence relating to the realizable value of a security. This evidence includes, but is not limited to, the following:

- adverse financial conditions of a specific issuer, segment, industry, region or other variables;
- the length of time and the extent to which the fair value has been less than cost; and
- the financial condition and near-term prospects of the issuer.

We consider whether the fair values of any of our cost or equity method investments have declined below their carrying value whenever adverse events or changes in circumstances indicate that recorded values may not be recoverable. If any such decline is considered to be other than temporary (based on various factors, including historical financial results, product development activities and the overall health of the affiliate's industry), then a write-down of the investment would be recorded in operating expense to its estimated fair value. In 2015, we recorded total impairments to a cost method investment of \$2.2 million, in other income (expense), net. For the year ended December 31, 2014 we recorded total impairments to a cost method investment of \$6.0 million, of which \$4.8 million was recorded in other expense, net and \$1.2 million was recorded in research and development expense. For the year ended December 31, 2013, we recorded an impairment of cost method investment of \$3.4 million in other income (expense), net.

## Impairment of Long-Lived Assets

We review our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or a group of assets may not be recoverable. We consider, amongst other indicators, a history of operating losses or a change in expected sales levels to be indicators of potential impairment. Assets are grouped and evaluated for impairment at the lowest level for which there are identifiable cash flows that are largely independent of the cash flows of other groups of assets. If an asset is determined to be impaired, the loss is measured as the amount by which the carrying amount of the asset exceeds fair value which is determined by applicable market prices, when available. When market prices are not available, we generally measure fair value by discounting projected future cash flows of the asset. Considerable judgment is necessary to estimate discounted future cash flows. Accordingly, actual results could differ from such estimates. In 2015, we recorded asset impairment charges of \$3.1 million in general and administrative, restructuring, integration and other expenses in the accompanying consolidated statements of income related to the abandonment of certain software projects following the acquisition of MO BIO. During the year ended December 31, 2014,

in connection with our internal and acquisition related restructuring, we recorded asset impairment charges of \$ 19.6 million, of which \$ 15.5 million is recorded in cost of sales, \$ 2.4 million is recorded in sales and marketing expense, and \$ 1.7 million in general and administrative, restructuring, integration and other expenses in the accompanying consolidated statements of income. During the year ended December 31, 2013 we recorded asset impairment charges of \$ 16.2 million in general and administrative, restructuring, integration and other expenses in the accompanying consolidated statements of income related to the abandonment of certain projects.

#### 4. Segment Information

Considering the acquisitions made during 2015, we determined that we still operate as one business segment in accordance with FASB ASC Topic 280, *Segment Reporting*. As a result of our continued restructuring and streamlining of the growing organization, our chief operating decision maker (CODM) makes 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 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 including bioinformatics solutions, and revenues derived from instrumentation sales.

[11] Net Sales by Product Categories

\$ 1,000	2015	2014	2013
<b>Net sales</b>			
Consumables and related revenues	1,114,580	1,172,728	1,140,203
Instrumentation	166,406	172,049	161,781
<b>Total</b>	<b>1,280,986</b>	<b>1,344,777</b>	<b>1,301,984</b>

## 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 locations 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 \$ 11.3 million, \$ 13.7 million and \$ 14.4 million for the years ended 2015, 2014 and 2013, respectively, and these amounts are included in the line item Europe, Middle East and Africa as shown in the table below.

### [12] Net Sales by Geographic Regions

\$ 1,000	2015	2014	2013
<b>Net sales</b>			
Americas:			
United States	525,532	543,877	545,600
Other Americas	79,578	75,974	80,299
Total Americas	605,110	619,851	625,899
Europe, Middle East and Africa	409,955	451,092	416,334
Asia Pacific and Rest of World	265,921	273,834	259,751
<b>Total</b>	<b>1,280,986</b>	<b>1,344,777</b>	<b>1,301,984</b>

Long-lived assets include property, plant and equipment. The Netherlands, which is included in the balances for Europe, reported long-lived assets of \$ 0.3 million and \$ 1.0 million as of December 31, 2015 and 2014, respectively.

### [13] Long-lived Assets by Geographic Regions

\$ 1,000	2015	2014
<b>Long-lived assets</b>		
Americas:		
United States	148,748	136,461
Other Americas	2,691	2,863
Total Americas	151,439	139,324
Germany	243,120	241,475
Other Europe	35,573	35,362
Asia Pacific and Rest of World	12,812	11,932
<b>Total</b>	<b>442,944</b>	<b>428,093</b>

## 5. Acquisitions

Acquisitions have been accounted for as business combinations, and the acquired companies' results have been included in the accompanying consolidated statements of income 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.

### 2015 Acquisitions

During 2015, we completed three acquisitions, 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, 2015, the purchase price allocations are preliminary. 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, agreed to the sale of all its assets and liabilities, with the exception of its intellectual property portfolio. In addition, we made a tender offer to acquire the remaining Marseille shares. Per the terms of the tender offer, \$2.5 million is set aside as of December 31, 2015 in restricted cash for the remaining shares which were finally acquired early in 2016. During 2015, we acquired additional Marseille shares for a total of \$8.0 million and held 97.22% of the Marseille shares as of December 31, 2015.

### 2014 Acquisition

In December 2014, we acquired the enzyme solutions business of Enzymatics Inc. (Enzymatics), a U.S. company whose products are used in an estimated 80% of all next-generation sequencing (NGS) workflows. The comprehensive Enzymatics portfolio complements QIAGEN's leading offering of universal NGS products, advancing our strategy to drive the adoption of NGS in clinical healthcare. The cash consideration totaled \$114.2 million of which \$5.8 million was retained in an escrow account as of December 31, 2015 to cover any claims for breach of any representations, warranties or indemnities. The acquisition of Enzymatics did not have a material business impact to net sales, net income or earnings per share, and therefore no pro forma financial information has been provided herein.

The final purchase price allocation of Enzymatics did not differ from the preliminary estimates other than an increase of \$2.1 million in fair value of contingent consideration, a \$0.4 million increase of long-term deferred tax liability and an additional \$0.1 million increase of other opening balance sheet adjustments. The corresponding impact for these adjustments was an increase to goodwill of \$2.4 million. These changes to arrive at the final purchase price allocation were not material to the consolidated financial statements.

The final purchase price allocation for Enzymatics was as follows:

**[14] Enzymatics Final Purchase Price Allocation**

<b>\$ 1,000</b>	<b>Enzymatics acquisition</b>
<b>Purchase price:</b>	
Cash consideration	114,224
Fair value of contingent consideration	13,600
	<b>127,824</b>
<b>Final allocation:</b>	
Cash and cash equivalents	1,178
Accounts receivable	2,813
Prepaid and other current assets	1,330
Fixed and other long-term assets	1,414
Accounts payable	(3,090)
Accruals and other current liabilities	(1,940)
Long term deferred tax liability	(21,558)
Developed technology, licenses and know-how	28,600
Tradenames	6,600
Customer relationships	22,300
Goodwill	90,177
	<b>127,824</b>

The weighted-average amortization period for the intangible assets is 11.1 years. The goodwill acquired is not deductible for tax purposes.

Certain acquisitions may include contingent consideration which is recorded as part of the purchase consideration based on the acquisition date fair value. The total fair value of the contingent consideration for Enzymatics of \$13.6 million was recorded as purchase price using a probability-weighted analysis of the future milestones using discount rates between 0.70% and 2.20%. Under the purchase agreement, we could be required to make additional contingent cash payments totaling \$17.0 million through 2017. This is discussed further in Note 14, "Fair Value Measurements," where we assess and adjust the fair value of the contingent consideration liabilities, if necessary, until the settlement or expiration of the contingency occurs.

### Other 2014 Acquisitions

During 2014, we completed other acquisitions which individually were not significant to the overall consolidated financial statements. The cash paid for these acquisitions, net of cash acquired, totaled \$47.4 million. Each of these acquisitions individually 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.

### 2013 Acquisition

On April 29, 2013, we acquired 100% of the outstanding common shares of Ingenuity Systems, Inc. (Ingenuity), a leading provider of software solutions that efficiently and accurately analyze and interpret the biological meaning of genomic data. The cash consideration totaled \$106.9 million. The acquisition of Ingenuity 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.

The final purchase price allocation for Ingenuity was as follows:

#### [15] Ingenuity Systems Final Purchase Price Allocation

\$ 1,000	Ingenuity acquisition
<b>Purchase price:</b>	
Cash consideration	106,932
	<b>106,932</b>
<b>Final allocation:</b>	
Cash and cash equivalents	4,449
Accounts receivable	2,018
Prepaid and other current assets	1,834
Current deferred tax asset	3,126
Fixed and other long-term assets	2,648
Long-term deferred tax asset	13,203
Accounts payable	(2,662)
Accruals and other current liabilities	(14,558)
Liabilities assumed	(557)
Developed technology, licenses and know-how	37,903
Tradenames	3,359
In-process research and development	2,069
Customer relationships	1,023
Goodwill	69,479
Deferred tax liability on fair value of identifiable intangible assets acquired	(16,402)
	<b>106,932</b>

The weighted-average amortization period for the intangible assets is 14.1 years. The goodwill acquired is not deductible for tax purposes.

Since the acquisition date, the results of Ingenuity have been included in our consolidated results through December 31, 2013. Net sales totaled \$ 14.7 million and net loss attributable to the owners of QIAGEN N.V. was \$ 6.3 million for 2013. Acquisition-related costs for Ingenuity for 2013 amounted to \$ 1.2 million.

### Other 2013 Acquisitions

During 2013, we completed the acquisition of CLC bio, a privately-held company located in Aarhus, Denmark that has created the leading commercial data analysis solutions and workbenches for next-generation sequencing, used by top academic and pharmaceutical research as well as clinical institutions. Purchase consideration totaled \$ 68.2 million in cash, net of cash acquired, and as of December 31, 2014, the purchase price allocation is final. The final purchase price allocation for CLC bio did not differ from the preliminary estimates. This acquisition was not significant to the overall consolidated financial statements.

## 6. Restructuring

### 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, \$ 19.6 million for fixed asset abandonment charges, \$ 8.7 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, 2015, a restructuring accrual of \$ 4.1 million was included in accrued and other liabilities. At December 31, 2014, a restructuring accrual of \$ 12.1 million was included in accrued and other liabilities and \$ 2.6 million was included in other long term liabilities in the accompanying consolidated balance sheet.



## [16] Components of 2014 Restructuring Costs

At December 31

\$ 1,000	Personnel-related	Facility-related	Contract and other costs	Total
<b>Balance at December 31, 2014</b>	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)
<b>Balance at December 31, 2015</b>	<b>469</b>	<b>3,428</b>	<b>214</b>	<b>4,111</b>

## 2011 Restructuring

Late in 2011, we began a project to enhance productivity by streamlining the organization and reallocating resources to strategic initiatives to help drive growth and innovation, strengthen our industry leadership position and improve longer-term profitability. This project eliminated organizational layers and overlapping structures, actions to enhance our processes, speed and productivity. The last group of initiatives included actions to focus research and development activities on higher-growth areas in all customer classes, concentrate operations at fewer sites, and realign sales and regional marketing teams in the U.S. and Europe to better address customer needs in a more streamlined manner across the continuum from basic research to translational medicine and clinical diagnostics. Restructuring charges were recorded in 2013 as part of this transformational project.

The following table summarizes the cash components of the restructuring costs. At December 31, 2015, no restructuring accrual remained for this program. At December 31, 2014, a restructuring accrual of \$0.7 million was included in accrued and other liabilities in the accompanying consolidated balance sheets.

## [17] Cash Components of Restructuring Costs

At December 31

\$ 1,000	Personnel-related	Facility-related	Contract and other costs	Total
<b>Balance at December 31, 2013</b>	9,782	313	511	10,606
Payments	(8,071)	(313)	(511)	(8,895)
Release of excess accrual	(775)	—	—	(775)
Foreign currency translation adjustment	(210)	—	—	(210)
<b>Balance at December 31, 2014</b>	<b>726</b>	<b>—</b>	<b>—</b>	<b>726</b>
Payments	(381)	—	—	(381)
Release of excess accrual	(340)	—	—	(340)
Foreign currency translation adjustment	(5)	—	—	(5)
<b>Balance at December 31, 2015</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

The costs in the above table do not include consulting costs associated with third-party service providers that assisted with execution of the restructuring. We accrue for consulting costs as the services are provided.

Since 2011, we have incurred cumulative restructuring costs totaling \$234.6 million which include \$56.4 million for personnel related costs, \$97.7 million of impairments, and \$80.5 million of contract, consulting and other related costs. Of the \$234.6 million cumulative restructuring costs since 2011, \$188.5 million were recorded in general and administrative, restructuring, integration and other and \$46.1 million were recorded in cost of sales. We did not record additional restructuring charges in 2015 or 2014 related to this program.

## 7. Short-Term Investments

At December 31, 2015 and 2014, we had \$127.1 million and \$180.2 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, 2015, these loans consist of \$94.4 million and €30.0 million (\$32.7 million as of December 31, 2015) which mature at various dates through December 2018. All instruments that have an original tenor of more than 12 months include redemption rights 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.

At December 31, 2015 and 2014, we also had €3.4 million (\$3.7 million) and €3.2 million (\$3.9 million), respectively in term deposits with final maturities in 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 year ended December 31, 2015 and 2014, proceeds from sales of short term investments totaled \$367.7 million and \$275.8 million, respectively. During the years ended December 31, 2015 and 2014, realized losses totaled \$6.0 million and \$3.9 million, respectively. There were no realized gains or losses during 2013.

## 8. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets are summarized as follows as of December 31, 2015 and 2014:

[18] Prepaid Expenses and Other Current Assets		As of December 31	
\$ 1,000		2015	2014
Prepaid expenses		38,986	40,359
Value added tax		15,219	13,332
Other receivables		9,876	10,778
Fair value of derivative instruments		3,758	46,802
Amounts held in escrow in connection with acquisitions		2,500	2,500
		<b>70,339</b>	<b>113,771</b>

## 9. Property, Plant and Equipment

Property, plant and equipment, including equipment acquired under capital lease obligations, are summarized as follows as of December 31, 2015 and 2014:

[19] Property, Plant and Equipment		As of December 31	
\$ 1,000	Estimated useful life (in years)	2015	2014
Land	—	15,452	15,653
Buildings and improvements	5 – 40	302,068	300,131
Machinery and equipment	3 – 10	253,556	244,906
Computer software	3 – 7	125,396	102,835
Furniture and office equipment	3 – 10	92,281	86,556
Construction in progress	—	63,825	70,575
		<b>852,578</b>	<b>820,656</b>
Less: Accumulated depreciation and amortization		(409,634)	(392,563)
<b>Property, plant and equipment, net</b>		<b>442,944</b>	<b>428,093</b>

---

Amortization of assets acquired under capital lease obligations is included within accumulated depreciation and amortization above for the years ended December 31, 2015 and 2014, respectively. For the years ended December 31, 2015, 2014 and 2013 depreciation and amortization expense totaled \$59.5 million, \$67.9 million and \$72.5 million, respectively. For the years ended December 31, 2015, 2014 and 2013 amortization related to computer software to be sold, leased or marketed totaled \$5.1 million, \$6.2 million and \$4.8 million, respectively. In 2015, we recorded asset impairment charges of \$3.1 million, of which \$1.0 million related to computer software to be sold, leased or marketed related to the abandonment of certain projects following the acquisition of MO BIO. In connection with the restructuring discussed more fully in Note 6, impairment charges of \$19.6 million, of which \$8.8 million related to computer software to be sold, leased or marketed, and \$16.2 million were recorded related to discontinued projects in the years ended December 31, 2014 and 2013, respectively.

Repairs and maintenance expense was \$15.4 million, \$15.9 million and \$14.0 million in 2015, 2014 and 2013, respectively. For the year ended December 31, 2015 and 2014, construction in progress primarily includes amounts related to ongoing software development projects. For the years ended December 31, 2015, 2014 and 2013, interest capitalized in connection with construction projects was not significant.

## 10. Investments

We have made strategic investments in certain companies that are accounted for using the equity or cost 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. The fair value of cost and equity-method investments is estimated when there are identified events or changes in circumstances that may have an impact on the fair value of the investment. A summary of these equity method investments, which are included in other long-term assets in the consolidated balance sheets, is as follows:

**[20] Equity Method Investments and Share of Income**

\$ 1,000	Company	Ownership percentage	Equity investments as of		Share of income (loss) for		
			December 31		the years ended December 31		
			2015	2014	2015	2014	2013
	PreAnalytiX GmbH	50.00	10,627	18,954	1,878	3,557	2,044
	Biotype Innovation GmbH	24.90	3,775	—	(595)	—	—
	Pyrobett	19.00	2,111	2,711	(600)	(539)	(265)
	QIAGEN (Suzhou) Institute of Translation Research Co., Ltd.	30.00	203	216	(107)	(409)	(112)
	QIAGEN Finance	100.00	—	414	85	147	93
	QBM Cell Science	19.50	—	398	—	(2)	(6)
	Dx Assays Pte Ltd	33.30	—	—	—	710	—
			16,716	22,693	661	3,464	1,754

We had a 100% interest in QIAGEN Finance (Luxembourg) S.A. (QIAGEN Finance) which was established for the purpose of issuing convertible debt in 2004. The proceeds of the 2004 Notes were loaned to subsidiaries within the consolidated QIAGEN N.V. group. QIAGEN N.V. had guaranteed the 2004 Notes, and had agreements with QIAGEN Finance to issue common shares to the investors in the event of conversion of the 2004 Notes. QIAGEN Finance was a variable interest entity. We did not hold any variable interests in QIAGEN Finance, and we were not the primary beneficiary, therefore QIAGEN Finance was not consolidated. Accordingly, the 2004 convertible debt was not included in the consolidated statements of QIAGEN N.V., though QIAGEN N.V. did report the full obligation of the debt through its liabilities to QIAGEN Finance. QIAGEN N.V. accounted for its investment in QIAGEN Finance as an equity investment until the first quarter of 2015 and accordingly recorded 100% of the profit or loss of QIAGEN Finance in the gain or loss from equity method investees. During the first quarter of 2015, we repaid the \$250.9 million loan to QIAGEN Finance and repurchased the warrant agreement with QIAGEN Finance.

At December 31, 2015 and 2014, we had a total of cost-method investments in non-publicly traded companies with carrying amounts of \$17.2 million and \$18.6 million, respectively, which are included in other long-term assets in the consolidated balance sheets. The fair-value of these cost-method investments are not estimated unless there are identified events or changes in circumstances that may have a significant adverse effect on the fair value of the investment. During the years ended December 31, 2015, and 2014, we made cost-method investments totaling \$4.4 million, and \$9.4 million, respectively. In 2015, we recorded impairments to cost method investments of \$2.2 million in other income (expense), net. In 2014, we recorded total impairments to a cost method investment of \$6.0 million, of which \$4.8 million was recorded in other income (expense), net and \$1.2 million was recorded in research and development expense. In the first quarter of 2016 we entered into a short-term agreement with one of the cost-method investees where they may receive up to \$0.6 million.

During 2015, our former cost-method investment in Curetis AG was reclassified as a long-term marketable security upon the completed IPO of its Dutch holding company, Curetis N.V. At December 31, 2015, we held 320,712 shares with a fair market value of \$ 3.5 million and a cost of \$ 2.3 million. We are restricted from selling our shares until May 2016. Long-term marketable securities are included in other long-term assets in the accompanying consolidated balance sheets.

## 11. Goodwill and Intangible Assets

The following sets forth the intangible assets by major asset class as of December 31, 2015 and 2014:

[21] Intangible Assets by Major Asset Class		As of December 31			
		2015		2014	
\$ 1,000	Weighted average life (in years)	Gross carrying amount	Accumulated amortization	Gross carrying amount	Accumulated amortization
Amortized intangible assets:					
Patent and license rights	10.57	338,175	(205,880)	312,224	(185,132)
Developed technology	10.41	693,294	(409,374)	708,509	(361,825)
Customer base, trademarks, and non-compete agreements	10.52	432,036	(211,830)	423,685	(179,316)
	<b>10.48</b>	<b>1,463,505</b>	<b>(827,084)</b>	<b>1,444,418</b>	<b>(726,273)</b>
Unamortized intangible assets:					
In-process research and development		—		8,769	
Goodwill		1,875,698		1,887,963	
		<b>1,875,698</b>		<b>1,896,732</b>	

The changes in intangible assets for the years ended December 31, 2015 and 2014 are as follows:

**[22] Changes in Intangible Assets**

\$ 1,000	Intangibles	Goodwill
<b>Balance at December 31, 2013</b>	790,405	1,855,691
Additions	9,677	—
Acquisitions	103,130	99,846
Amortization	(132,890)	—
Impairment losses	(8,711)	—
Foreign currency translation adjustments	(34,697)	(67,574)
<b>Balance at December 31, 2014</b>	726,914	1,887,963
Additions	45,575	—
Purchase adjustments	(8,200)	1,656
Acquisitions	31,412	37,084
Amortization	(131,953)	—
Impairment losses	(205)	—
Foreign currency translation adjustments	(27,122)	(51,005)
<b>Balance at December 31, 2015</b>	<b>636,421</b>	<b>1,875,698</b>

Amortization expense on intangible assets totaled approximately \$ 132.0 million, \$ 132.9 million and \$ 126.9 million, respectively, for the years ended December 31, 2015, 2014 and 2013.

In 2015, we recorded intangible asset impairment of \$ 0.2 million related to the abandonment of certain projects. In connection with the restructuring discussed more fully in Note 6, impairment charges of \$ 8.7 million and \$ 19.7 million related to discontinued projects were recorded in the years ended December 31, 2014 and 2013, respectively.

Cash paid for purchases of intangible assets during the years ended December 31, 2015 and 2014 totaled \$ 19.7 million and \$ 10.4 million of which \$ 6.4 million and \$ 0.7 million, respectively, were not yet in service and are included in other long-term assets in the consolidated balance sheet. Intangible asset additions of \$ 45.6 million includes \$ 13.3 million of cash paid during the year ended December 31, 2015, together with \$ 12.1 million of additions which were previously recorded as prepayments, \$ 10.0 million of additions which were previously included in other long-term assets, \$ 5.9 million of non-cash additions and \$ 4.4 million of additions which were accrued as of December 31, 2015.

The changes in the carrying amount of goodwill during the years ended December 31, 2015 and 2014 resulted primarily from changes in foreign currency translation together with acquired goodwill from 2015 acquisitions and adjustments made in connection with 2014 purchase price

allocation for the acquisition of Enzymatics discussed in Note 5. Accumulated goodwill impairment totaled \$ 1.6 million as of December 31, 2015 and 2014.

The estimated fair values of acquired in-process research and development projects which have not reached technological feasibility at the date of acquisition are capitalized and subsequently tested for impairment through completion of the development process, at which point the capitalized amounts are amortized over their estimated useful life. If a project is abandoned rather than completed, all capitalized amounts are written-off immediately. During 2015, two development projects were completed and \$ 8.8 million of in-process research and development costs were reclassified into developed technology.

Amortization of intangibles for the next five years is expected to be approximately:

[23] Expected Future Ammortization of Intangible Assets	Years Ended December 31
\$ 1,000	Amortization
2016	132,640
2017	114,512
2018	92,591
2019	74,479
2020	50,069

## 12. Accrued and Other Liabilities

Accrued and other liabilities at December 31, 2015 and 2014 consist of the following:

[24] Accrued and Other Liabilities	As of December 31	
\$ 1,000	2015	2014
Accrued expenses	55,928	79,120
Payroll and related accruals	52,036	54,768
Deferred revenue	49,812	49,190
Accrued royalties	13,786	13,855
Cash collateral	7,826	—
Accrued contingent consideration and milestone payments	6,995	7,477
Accrued interest on long-term debt	4,239	8,121
Current portion of capital lease obligations	922	1,125
Fair value of derivative instruments	525	10,547
<b>Total accrued and other liabilities</b>	<b>192,069</b>	<b>224,203</b>



### 13. 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. We do not offset any amounts under any master netting arrangements. During 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, 2015, we had a net liability position of \$7.8 million recorded in accrued and other liabilities in the accompanying balance sheet, and we did not post any collateral to any of our counterparties. We do not offset the fair value of derivative instruments with cash collateral held or received from the same counterparty under a master netting arrangement.

During 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 2015, we did not record any hedge ineffectiveness related to any cash-flow hedges in earnings. Based on their valuation as of December 31, 2015, we expect that no significant amount of derivative gains included in accumulated other comprehensive income 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, 2014, all derivatives that qualify for hedge accounting are fair value hedges. For derivative instruments that are designated and qualify as a fair value hedge, the effective portion of the gain or loss on the derivative is reflected in earnings. This earnings effect is offset by the change in the fair value of the hedged item attributable to the risk being hedged that is also recorded in earnings. In 2015 and 2014, there is no ineffectiveness. The cash flows derived from derivatives are classified in the consolidated statements of cash flows in the same category as the condensed consolidated balance sheet account of the underlying item.

## Interest Rate Derivatives

We use interest rate derivative contracts 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 have agreed to exchange, at specified intervals, the difference between fixed and floating interest amounts calculated by reference to an agreed-upon notional principal amount. 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, 2015, the € 180.0 million notional swap amount had an aggregate fair value of \$ 6.9 million, which is recorded in other long-term assets in the accompanying 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 and qualify for hedge accounting as fair value hedges. We determined that no ineffectiveness exists related to these swaps. As of December 31, 2015 and 2014, the \$ 200.0 million notional swap amount had an aggregate fair value of \$ 5.8 million and \$ 3.3 million, respectively, which is recorded in other long-term assets in the accompanying balance sheet.

## Call Options

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 address the equity price risk inherent in the cash conversion feature by offsetting 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 14. The fair value of the Call Options at December 31, 2015 and 2014 was approximately \$ 169.0 million and \$ 147.7 million, respectively which is recorded in other long-term assets in the accompanying balance sheet.

The Call Options do not qualify for hedge accounting treatment. Therefore, the change in fair value of these instruments is recognized immediately in our consolidated statements of income in other (expense) income, net. For the years ended December 31, 2015 and 2014, the change in the fair value of the Call Options resulted in gains of \$21.3 million and \$42.5 million, respectively. Because the terms of the Call Options are substantially similar to those of the Cash Convertible Notes' embedded cash conversion option, discussed below, we expect the effect on earnings from those two derivative instruments to mostly offset each other.

### Cash Convertible Notes Embedded Cash Conversion Option

The embedded cash conversion option within the Cash Convertible Notes 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 income in other (expense) income, 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 14. The fair value of the embedded cash conversion option at December 31, 2015 and 2014 was approximately \$171.0 million and \$149.5 million which is recorded in other long-term liabilities in the accompanying balance sheet. For the years ended December 31, 2015 and 2014 the change in the fair value of the embedded cash conversion option resulted in losses of \$21.5 million and \$44.3 million, respectively.

### 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.

### Undesignated Derivative Instruments

We are party to various foreign exchange forward, option and swap arrangements which had, at December 31, 2015, an aggregate notional value of \$264.2 million and fair value of \$1.4 million included in prepaid and other assets and \$0.5 million included in accrued and other liabilities, respectively, which expire at various dates through March 2016.

We were party to various foreign exchange forward and swap arrangements which had, at December 31, 2014, an aggregate notional value of \$1.3 billion and fair values of \$46.8 million included in prepaid and other assets and \$10.5 million included in accrued and other liabilities, respectively, which expired at various dates through December 2015. 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 (expense) income, 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, 2015 and 2014:

[25] Fair Value of Derivative Instruments		As of December 31		
	Derivatives in asset positions fair value		Derivatives in liability positions fair value	
	2015	2014	2015	2014
<b>\$ 1,000</b>				
<b>Derivative instruments designated as hedges</b>				
Interest rate contracts <sup>1</sup>	12,687	3,294	—	—
<b>Total derivative instruments designated as hedges</b>	<b>12,687</b>	<b>3,294</b>	<b>—</b>	<b>—</b>
<b>Undesignated derivative instruments</b>				
Call spread overlay	169,037	147,707	(170,951)	(149,450)
Foreign exchange contracts	1,393	46,802	(525)	(10,547)
<b>Total derivative instruments</b>	<b>170,430</b>	<b>194,509</b>	<b>(171,476)</b>	<b>(159,997)</b>

1 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, 2015, 2014 and 2013:

[26] Gains and Losses on Derivative Instruments		Years Ended December 31		
2015 \$ 1,000	Gain (loss) recognized in AOCI	Location of gain/loss in income statement	(Gain) loss reclassified from AOCI into income	Gain (loss) recognized in income
<b>Cash flow hedges</b>				
Interest rate contracts	5,337	Other (expense) income, net	(5,273)	n/a
<b>Fair value hedges</b>				
Interest rate contracts	—	Other (expense) income, net	—	1,691
<b>Undesignated derivative instruments</b>				
Call spread overlay	n/a	Other (expense) income, net	n/a	(171)
Foreign exchange contracts	n/a	Other (expense) income, net	n/a	21,434
				<b>21,263</b>
<b>2014 \$ 1,000</b>				
<b>Fair value hedges</b>				
Interest rate contracts	—	Other (expense) income, net	—	3,294
<b>Undesignated derivative instruments</b>				
Call spread overlay	n/a	Other (expense) income, net	n/a	(1,743)
Foreign exchange contracts	n/a	Other (expense) income, net	n/a	61,713
				<b>59,970</b>
<b>2013 \$ 1,000</b>				
<b>Undesignated derivative instruments</b>				
Foreign exchange contracts	n/a	Other (expense) income, net	n/a	(19,409)

The amounts noted in the table above for accumulated other comprehensive income (AOCI) do not include any adjustment for the impact of deferred income taxes.

---

## 14. Fair Value Measurements

Assets and liabilities are measured at fair value according to a three-tier fair value 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 short-term investments, which are classified in Level 1 and Level 2 of the fair value hierarchy, marketable securities discussed in Note 10, which are classified in Level 1, 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 15, 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 and the embedded conversion option liability. See Note 15, "Lines of Credit and Debt", and Note 13, "Derivatives and Hedging", 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, 2015 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 0.70% and 2.20%), 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 following table presents our fair value hierarchy for our financial assets and liabilities measured at fair value on a recurring basis:

[27] Fair Value Hierarchy for Financial Assets and Liabilities

As of December 31

	2015				2014			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>\$ 1,000</b>								
<b>Assets:</b>								
Short-term investments	3,674	127,143	—	130,817	3,885	180,151	—	184,036
Marketable securities	3,485	—	—	3,485	—	—	—	—
Call option	—	169,037	—	169,037	—	147,707	—	147,707
Foreign exchange contracts	—	1,393	—	1,393	—	46,802	—	46,802
Interest rate contracts	—	12,687	—	12,687	—	3,294	—	3,294
	<b>7,159</b>	<b>310,260</b>	<b>—</b>	<b>317,419</b>	<b>3,885</b>	<b>377,954</b>	<b>—</b>	<b>381,839</b>
<b>Liabilities:</b>								
Foreign exchange contracts	—	(525)	—	(525)	—	(10,547)	—	(10,547)
Cash conversion option	—	(170,951)	—	(170,951)	—	(149,450)	—	(149,450)
Contingent consideration	—	—	(17,678)	(17,678)	—	—	(17,477)	(17,477)
	<b>—</b>	<b>(171,476)</b>	<b>(17,678)</b>	<b>(189,154)</b>	<b>—</b>	<b>(159,997)</b>	<b>(17,477)</b>	<b>(177,474)</b>

Activity for liabilities with Level 3 inputs is summarized in the following table:

[28] Activity for Liabilities with Level 3 Inputs	Years Ended December 31
\$ 1,000	Fair value measurements using significant unobservable inputs (level 3) contingent consideration
<b>Balance at December 31, 2013</b>	(6,127)
Additions from acquisitions	(13,057)
Payments	457
Gain included in earnings	1,162
Foreign currency translation adjustments	88
<b>Balance at December 31, 2014</b>	(17,477)
Additions	(5,476)
Gain included in earnings	5,225
Foreign currency translation adjustments	50
<b>Balance at December 31, 2015</b>	<b>(17,678)</b>

For the year ended December 31, 2015, \$ 10.7 million is included in other long-term liabilities and \$ 7.0 million is included in accrued liabilities. During 2015, gains for the reduction in the fair value of contingent consideration totaling \$ 5.2 million were recognized in general and administrative, restructuring, integration and other. For the year ended December 31, 2014, the gains of \$ 1.2 million were recognized in cost of sales.

The carrying values of financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and other accrued liabilities, approximate their fair values due to their short-term maturities. The estimated fair value of long-term debt as disclosed in Note 15 was based on current interest rates for similar types of borrowings. The estimated fair values may not represent actual values of the financial instruments that could be realized as of the balance sheet date or that will be realized in the future. There were no fair value adjustments in the years ended December 31, 2015 and 2014 for nonfinancial assets or liabilities required to be measured at fair value on a nonrecurring basis other than the impairment of cost-method investments as discussed in Note 10.



## 15. Lines of Credit and Debt

Our credit facilities available at December 31, 2015 total €436.6 million (approximately \$475.3 million). This includes a €400.0 million syndicated multi-currency revolving credit facility expiring December 2020 of which no amounts were utilized 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, 2015. The €400.0 million facility can be utilized in euro, U.K. pound 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, six or twelve months. The commitment fee is calculated based on 35% of the applicable margin. In 2015 and 2014, \$0.9 million and \$1.8 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, 2015. The credit facilities are for general corporate purposes.

At December 31, 2015, total long-term debt was approximately \$1.1 billion. Total long-term debt consists of the following as of December 31, 2015 and 2014:

<b>[29] Total Long-Term Debt</b>	As of December 31	
<b>\$1,000</b>	<b>2015</b>	<b>2014</b>
Notes payable to QIAGEN Finance bearing interest at an effective rate of 1.8% due in February 2024	—	130,451
3.19% Series A Senior Notes due October 16, 2019	73,994	73,645
3.75% Series B Senior Notes due October 16, 2022	303,991	302,648
3.90% Series C Senior Notes due October 16, 2024	27,000	27,000
0.375% Senior Unsecured Cash Convertible Notes due 2019	396,198	386,332
0.875% Senior Unsecured Cash Convertible Notes due 2021	258,404	251,335
Other notes payable bearing interest up to 6.28%	—	668
Total long-term debt	1,059,587	1,172,079
Less current portion	—	131,119
<b>Long-term portion</b>	<b>1,059,587</b>	<b>1,040,960</b>

Interest expense on long-term debt was \$34.5 million, \$36.4 million and \$28.4 million for the years ended December 31, 2015, 2014 and 2013, respectively.

Future maturities of long-term debt as of December 31, 2015 are as follows:

[30] Future Principal Maturities of Long-Term Debt	Years Ended December 31
<b>\$ 1,000</b>	
2016	—
2017	—
2018	—
2019	470,192
2020	—
Thereafter	589,395
	<b>1,059,587</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 were \$680.7 million, after payment of the net cost of the Call Spread Overlay described below and transaction costs. Additionally, we used \$372.5 million of the net proceeds to repay the 2006 Notes and related subscription right described below.

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.

The initial conversion rate is 7,056.7273 shares of our common stock per \$200,000 principal amount of Cash Convertible Notes (reflecting an initial conversion price of approximately \$28.34 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.

The Cash Convertible Notes are senior unsecured obligations, and rank senior in right of payment to any of our indebtedness that is expressly subordinated in right of payment to the Cash Convertible Notes; equal in right of payment to any of our unsecured indebtedness that is unsubordinated; junior in right of payment to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and junior to all indebtedness and other liabilities (including trade payables) of our subsidiaries.

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 income 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 13.

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, 2015, 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 \$ 495.5 million and \$ 452.0 million and the fair value of the 2021 Notes was \$ 356.1 million and \$ 318.1 million, at December 31, 2015 and 2014, 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 deferred as a long-term asset 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:

<b>[31] Interest Expense Related to the Cash Convertible Notes</b>	<b>Years Ended December 31</b>	
<b>\$ 1,000</b>	<b>2015</b>	<b>2014</b>
Coupon interest	4,238	3,307
Amortization of original issuance discount	16,935	12,836
Amortization of debt issuance costs	2,220	1,693
<b>Total interest expense related to the Cash Convertible Notes</b>	<b>23,393</b>	<b>17,836</b>

### 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 are derivative financial instruments and are discussed further in Note 13. The Warrants are equity instruments and are further discussed in Note 17.

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 €170.0 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 our 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. We were in compliance with these covenants at December 31, 2015. Based on an estimation using the changes in the U.S. Treasury rates, the fair value of these senior notes as of December 31, 2015 and December 31, 2014 was approximately \$399.3 million and \$394.3 million, respectively, taking into account that \$200.0 million of such notes are the hedged item in the fair value transaction described in Note 13. The fair value of such hedges was \$5.8 million and \$3.3 million at December 31, 2015 and December 31, 2014, respectively.

### 2006 Notes

In May 2006, we completed the offering of \$300 million of 3.25% Senior Convertible Notes due in 2026 (2006 Notes) through an unconsolidated subsidiary, QIAGEN Euro Finance (Euro Finance). The net proceeds of the 2006 Notes were loaned by Euro Finance to consolidated subsidiaries. These long-term notes payable to Euro Finance had an effective interest rate of 3.7% and were due in May 2026. Interest was payable semi-annually in May and November. The 2006 Notes were issued at 100% of principal value, and were convertible into 15.0 million common shares at the option of the holders upon the occurrence of certain events, at a price of \$20.00 per share, subject to adjustment. QIAGEN N.V. had an agreement with QIAGEN Euro Finance to issue shares to the investors in the event of conversion. This subscription right, along with the related receivable, was recorded at fair value in the equity of QIAGEN N.V. as paid-in capital. In March 2014, we redeemed the \$300.0 million loan payable to Euro Finance and approximately 98% of the subscription right with QIAGEN Euro Finance for \$372.5 million, and recognized a loss on the redemption of \$4.6 million in other (expense) income, net. The repayment amount was allocated to the loan and warrants on a relative fair value basis with \$67.9 million recorded against additional paid in capital for the redemption of the warrant subscription receivable. Contemporaneously, QIAGEN Euro Finance redeemed the 2006 Notes. During 2014, we issued 0.2 million common shares in exchange for \$3.9 million upon the exercise of the remaining subscription rights and subsequently Euro Finance was liquidated.

### 2004 Notes

In August 2004, we completed the sale of \$150 million of 1.5% Senior Convertible Notes due in 2024 (2004 Notes), through our unconsolidated subsidiary QIAGEN Finance. The net proceeds of the 2004 Notes were loaned by QIAGEN Finance to consolidated subsidiaries with an effective interest rate of 1.8% were due in February 2024. Interest 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 common shares at the option of the holders upon the occurrence of certain events at a price of \$12.6449 per share, subject to adjustment. QIAGEN N.V. had an agreement with QIAGEN Finance to issue shares to the investors in the event of conversion. The subscription right, along with the related receivable, was recorded at fair value in the equity of QIAGEN N.V. as paid-in capital. In 2014, 1.2 million common shares were issued in connection with the conversions. During 2015, we repaid the loan to QIAGEN Finance and repurchased the warrant agreement with QIAGEN Finance for \$250.9 million and recognized a loss of \$7.6 million in other (expense) income, net. The repayment amount was allocated to the loan and warrants on

a relative fair value basis with \$ 113.0 million recorded against additional paid in capital for the redemption of the warrant subscription receivable. Subsequent to these transactions QIAGEN Finance was liquidated.

## 16. Income Taxes

Income before income taxes for the years ended December 31, 2015, 2014 and 2013 consisted of:

[32] Income Before Provision for Income Taxes	Years Ended December 31		
\$ 1,000	2015	2014	2013
Pretax income in The Netherlands	(2,495)	(5,806)	24,135
Pretax income from foreign operations	134,993	124,320	13,203
	<b>132,498</b>	<b>118,514</b>	<b>37,338</b>

Income taxes for the years ended December 31, 2015, 2014 and 2013 are as follows:

[33] Provisions for Income Taxes	Years Ended December 31		
\$ 1,000	2015	2014	2013
Current – The Netherlands	973	936	2,874
Foreign	41,862	41,667	33,452
	42,835	42,603	36,326
Deferred – The Netherlands	250	317	—
Foreign	(37,444)	(41,608)	(68,086)
	(37,194)	(41,291)	(68,086)
<b>Total provision for income taxes</b>	<b>5,641</b>	<b>1,312</b>	<b>(31,760)</b>

The Netherlands statutory income tax rate was 25% for the years ended December 31, 2015, 2014 and 2013. Income from foreign subsidiaries is generally taxed at the statutory income tax rates applicable in the respective countries of domicile. The principal items comprising the differences between income taxes computed at The Netherlands statutory rate and our reported income taxes and effective tax rate for the years ended December 31, 2015, 2014 and 2013 are as follows:

[34] Principal Items Comprising Differences Between Computed and Effective Taxes

Years Ended December 31

	2015		2014		2013	
	Amount	Percent	Amount	Percent	Amount	Percent
<b>\$ 1,000</b>						
Income taxes at The Netherlands statutory rate	33,124	25.0	29,628	25.0	9,334	25.0
Taxation of foreign operations, net <sup>1</sup>	(36,407)	(27.5)	(29,959)	(25.3)	(31,826)	(85.2)
Tax impact from non-deductible items	14,411	10.9	9,339	7.9	6,219	16.7
Tax impact from tax exempt income <sup>2</sup>	(5,810)	(4.4)	(2,589)	(2.1)	(8,557)	(23.0)
Tax contingencies, net	1,163	0.9	4,409	3.7	1,986	5.3
Taxes due to changes in tax rates	(836)	(0.6)	330	0.3	(1,640)	(4.4)
Government incentives and other deductions <sup>3</sup>	(2,754)	(2.1)	(8,617)	(7.3)	(5,931)	(15.9)
Restructuring	—	—	—	—	(872)	(2.3)
Prior year taxes	(1,201)	(0.9)	(1,950)	(1.7)	(888)	(2.4)
Valuation allowance	3,450	2.6	—	—	—	—
Other items, net	501	0.4	721	0.6	415	1.1
<b>Total provision for income taxes</b>	<b>5,641</b>	<b>4.3</b>	<b>1,312</b>	<b>1.1</b>	<b>(31,760)</b>	<b>(85.1)</b>

- 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 and Luxembourg. These foreign tax benefits are due to a combination of favorable tax laws, rules, rulings, and exemptions in these jurisdictions. Additionally, in 2014 and 2013, in 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 The tax impact from tax exempt income primarily reflects The Netherlands' benefit of the 2006 and 2004 Notes discussed in Note 15 "Lines of Credit and Debt." These notes were redeemed in 2014 and 2015, respectively, and accordingly the related income tax benefit of \$2.6 million in 2014 and \$4.6 million in 2013, did not and will not impact our effective tax rate in 2015 and beyond. 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.
- 3 Government incentives include favorable tax regulations primarily in France (in 2014 and 2013) and the United States relating to research and development expense as well as the United States Internal Revenue Code Section 199 domestic production activities deduction.



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 2003 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 2011. The U.S. consolidated group is subject to federal and most state income tax examinations by tax authorities beginning the year ending December 31, 2011 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 is currently in process and we expect to close the audit in 2016. Additionally, in February 2016 German tax authorities began the audit of the German tax returns for the 2010–2013 tax years.

In 2012, we established a reserve related to withholding tax on a specific intercompany transaction for \$3.9 million including penalties. During 2013, we settled on this issue with the relevant tax authorities, which resulted in a release of the remaining \$1.9 million reserve in the fourth quarter of 2013.

In 2014, we established reserve related to cash convertible notes as discussed in Note 15 for \$3.0 million. 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:

**[35] Changes in Gross Amount of Unrecognized Tax Benefits**

\$ 1,000	Unrecognized tax benefits
<b>Balance at December 31, 2013</b>	11,585
Additions based on tax positions related to the current year	4,448
Decrease from currency translation	(31)
<b>Balance at December 31, 2014</b>	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)
<b>Balance at December 31, 2015</b>	<b>16,735</b>

At December 31, 2015 and 2014, our net unrecognized tax benefits totaled approximately \$ 16.7 million and \$ 16.0 million, respectively, of which \$ 16.7 million and \$ 14.0 million in benefits, if recognized, would favorably affect our effective tax rate in any future period. It is reasonably possible that approximately \$ 6.8 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 majority of these uncertain tax positions, if ever recognized in the financial statements, would be recorded in the statement of income as part of the income tax provision.

Our policy is to recognize interest accrued related to unrecognized tax benefits in interest expense and penalties within income tax expense. For the years ended December 31, 2015, 2014 and 2013, we have net interest (income) expense and penalties of \$0.3 million, \$(0.3) million and \$(1.7) million, respectively. At December 31, 2015 and 2014, we have accrued interest of \$ 1.4 million and \$ 1.1 million, respectively, which are not included in the table above.

We have recorded net deferred tax liabilities of \$ 43.1 million and \$ 82.8 million at December 31, 2015 and 2014, respectively. The components of the net deferred tax liability at December 31, 2015 and 2014 are as follows:

	2015		2014	
\$ 1,000	Deferred tax assets	Deferred tax liability	Deferred tax assets	Deferred tax liability
Net operating loss carry forwards	25,771	—	33,208	—
Accrued and other liabilities	22,648	—	20,425	—
Inventories	2,394	(1,060)	4,798	(1,358)
Allowance for bad debts	1,121	(465)	1,155	(483)
Currency revaluation	934	(132)	510	(211)
Depreciation and amortization	1,859	(27,854)	3,616	(10,645)
Capital lease	1,793	—	1,128	—
Tax credit carryforwards	1,110	—	3,347	—
Unremitted profits and earnings	—	(902)	—	(1,064)
Intangibles	272	(150,594)	1,030	(199,677)
Share-based compensation	14,726	—	14,209	—
Interest	54,307	—	38,013	—
Convertible debt	13,765	—	10,055	—
Other	2,080	(1,154)	1,901	(2,108)
	<b>142,780</b>	<b>(182,161)</b>	<b>133,395</b>	<b>(215,546)</b>
Valuation allowance	(3,703)	—	(602)	—
	<b>139,077</b>	<b>(182,161)</b>	<b>132,793</b>	<b>(215,546)</b>
<b>Net deferred tax liabilities</b>		<b>(43,084)</b>		<b>(82,753)</b>

At December 31, 2015 and 2014, we had \$264.2 million and \$270.1 million in total foreign net operating loss (NOL) carryforwards. At December 31, 2015 and 2014, we had \$110.3 million and \$120.8 million of U.S. federal (NOL) carryforwards. At December 31, 2015, the entire NOL in the U.S. is 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. As of December 31, 2015 and 2014, we had other foreign NOL carryforwards totaling approximately \$153.9 million and \$149.3 million, respectively, with \$9.3 million added in 2014 due to acquisitions. As of December 31, 2015, we had trade tax NOL carryforwards in Germany of \$103.5 million. Of the total \$153.9 million NOL carryforward, a portion of the foreign NOLs will be expiring beginning December 2016. The valuation allowance amounts for the years ended December 31, 2015 and December 31, 2014 are \$3.7 million and \$0.6 million. In 2015, we recorded a valuation allowance of \$3.4 million related to NOLs and released \$0.3 million of valuation allowance related to the expiration of statute of limitations.

As of December 31, 2015, 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 permanently reinvested or can be repatriated tax free. These earnings retained by subsidiaries and equity accounted investments amounted to \$333.6 million at December 31, 2015. We have \$20.1 million of undistributed earnings that we do not consider permanently reinvested and have recorded deferred income taxes or withholding taxes at December 31, 2015 and December 31, 2014, of approximately \$0.9 million and \$1.1 million respectively. There are no income tax consequences regarding payment of dividends to our shareholders. To date, we have never paid dividends.

## 17. Equity

### Issuance of Warrants

In March 2014, in connection with the issuance of our Cash Convertible Notes, we issued warrants (as described in Note 15) for 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 additional paid in capital in the accompanying consolidated balance sheets. 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 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).

### Share Repurchase Program

In 2012, the Supervisory Board approved a program authorizing management to purchase up to a total of \$ 100 million of our common shares (excluding transaction costs). We completed this share repurchase program in April 2013 having repurchased, between October 2012 and April 2013, a total of 5.1 million QIAGEN shares for an aggregate cost of \$99.0 million.

In 2013, we announced a second share buyback program, to purchase another \$ 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 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.

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.

### Accumulated Other Comprehensive Income (Loss)

The following table is a summary of the components of accumulated other comprehensive income (loss) as of December 31, 2015 and 2014:

<b>[37] Components of Accumulated Other Comprehensive Income (Loss)</b>	<b>As of December 31</b>	
<b>\$ 1,000</b>	<b>2015</b>	<b>2014</b>
Net unrealized gain on hedging contracts, net of tax	48	—
Net unrealized gain on marketable securities, net of tax	1,215	—
Net unrealized loss on pension, net of tax	(2,148)	(882)
Foreign currency effects from intercompany long-term investment transactions, net of tax of \$ 7.4 million and \$ 6.8 million in 2015 and 2014, respectively	(15,497)	(12,933)
Foreign currency translation adjustments	(242,774)	(120,920)
<b>Accumulated other comprehensive loss</b>	<b>(259,156)</b>	<b>(134,735)</b>

## 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" options and warrants to issue common shares were exercised. The following schedule summarizes the information used to compute earnings per common share:

<b>[38] Information Used to Compute Earnings per Common Share</b>	<b>Years Ended December 31</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>\$ 1,000, except per share data</b>			
<b>Net income attributable to the owners of QIAGEN N.V.</b>	<b>127,103</b>	<b>116,634</b>	<b>69,073</b>
Weighted average number of common shares used to compute basic net income per common share	233,483	232,644	234,000
Dilutive effect of stock options and restrictive stock units	3,539	3,573	3,023
Dilutive effect of outstanding warrants	136	5,321	5,152
<b>Weighted average number of common shares used to compute diluted net income per common share</b>	<b>237,158</b>	<b>241,538</b>	<b>242,175</b>
<b>Outstanding options and awards having no dilutive effect, not included in above calculation</b>	<b>37</b>	<b>422</b>	<b>1,616</b>
<b>Outstanding warrants having no dilutive effect, not included in above calculation</b>	<b>26,071</b>	<b>32,505</b>	<b>21,315</b>
<b>Basic earnings per common share attributable to the owners of QIAGEN N.V.</b>	<b>0.54</b>	<b>0.50</b>	<b>0.30</b>
<b>Diluted earnings per common share attributable to the owners of QIAGEN N.V.</b>	<b>0.54</b>	<b>0.48</b>	<b>0.29</b>

## 19. Commitments and Contingencies

### Lease Commitments

We lease facilities and equipment under operating lease arrangements expiring in various years through 2022. Certain rental commitments provide for escalating rental payments or have renewal options extending through various years. Certain facility and equipment leases constitute capital leases expiring in various years through 2018. The accompanying consolidated balance sheets include the assets and liabilities arising from these capital lease obligations. Rent expense under operating lease agreements was \$23.2 million, \$25.6 million and \$26.4 million for the years ended December 31, 2015, 2014 and 2013, respectively.

Minimum future obligations under capital and operating leases at December 31, 2015 are as follows:

[39] Minimum Future Obligations	As of December 31, 2015	
\$ 1,000	Capital 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
	<b>4,024</b>	<b>54,444</b>
Less: Amount representing interest	(682)	
	3,342	
Less: Current portion	(922)	
<b>Long-term portion</b>	<b>2,420</b>	

### 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 balance sheets include accrued royalties relating to these agreements in the amount of \$13.8 million and \$13.9 million at December 31, 2015 and 2014, respectively. Royalty expense relating to these agreements amounted to \$43.2 million, \$48.8 million, and \$53.2 million for the years ended December 31, 2015, 2014 and 2013, 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, 2015, we had commitments to purchase goods or services, and for future minimum guaranteed royalties. They are as follows:

[40] Purchase, License and Royalty Commitments		As of December 31, 2015	
\$ 1,000	Purchase commitments	License & royalty 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	
	<b>99,212</b>	<b>7,794</b>	

### 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 \$ 67.8 million based on the achievement of certain revenue and operating results milestones as follows: \$ 40.2 million in 2016, \$ 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 \$ 67.8 million total contingent obligation, we have assessed the fair value at December 31, 2015, to be \$ 17.7 million, of which \$ 10.7 million is included in other long-term liabilities and \$ 7.0 million is included in accrued 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, 2015, the commitment under these agreements totaled \$ 15.3 million.

### 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, 2015 and 2014 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 prepaid and other current assets and amount to \$2.5 million as of December 31, 2015 and 2014. In addition, we have recorded \$0.1 million for preacquisition contingencies as a liability under accrued and other liabilities as of December 31, 2014.

### Litigation

From time to time, we may be party to legal proceedings incidental to our business. As of December 31, 2015, 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.

## 20. Share-Based Compensation

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 able to 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 19.7 million Common Shares reserved and available for issuance under the 2005 and 2014 Plans at December 31, 2015.



## Stock Options

No stock options were granted in 2015 or 2014. During the year ended December 31, 2013, we granted 543,903 stock options. The following are the weighted-average assumptions used in valuing the stock options granted to employees for the year ended December 31, 2013:

[41] Stock Options Valuing Assumptions	Year Ended December 31
	2013
Stock price volatility	27%
Risk-free interest rate	0.88%
Expected life (in years)	4.93
Dividend rate	0%
Forfeiture rate	4.1%

A summary of the status of employee stock options as of December 31, 2015 and changes during the year then ended is presented below:

[42] Employee Stock Option Program Summary	As of December 31, 2015			
	Number of shares (in thousands)	Weighted average exercise price	Weighted average contractual term (in years)	Aggregate intrinsic value (\$ 1,000)
<b>All employee options</b>				
Outstanding at January 1, 2015	2,531	18.23		
Exercised	(669)	15.30		
Forfeited	(22)	17.01		
Expired	(19)	12.80		
<b>Outstanding at December 31, 2015</b>	<b>1,821</b>	<b>19.37</b>	<b>4.59</b>	<b>15,080</b>
<b>Vested at December 31, 2015</b>	<b>1,670</b>	<b>19.27</b>	<b>4.36</b>	<b>14,001</b>
<b>Vested and expected to vest at December 31, 2015</b>	<b>1,817</b>	<b>19.37</b>	<b>4.59</b>	<b>15,048</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 weighted-average grant-date fair value of options granted during the years ended December 31, 2013 was \$4.94. The total intrinsic value of options exercised during the years ended December 31, 2015, 2014 and 2013 was \$7.0 million, \$6.3 million and \$25.3 million, respectively. At December 31, 2015, the unrecognized share-based compensation expense related to employee stock option awards including estimated forfeitures is approximately \$0.2 million and will be recognized over a weighted average period of approximately 0.27 years.

At December 31, 2015, 2014 and 2013, 1.7 million, 2.1 million and 2.3 million options were exercisable at a weighted average price of \$ 19.27, \$ 18.10 and \$ 16.99 per share, respectively. The options outstanding at December 31, 2015 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 7.2%. At December 31, 2015, there was \$77.5 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 4.49 years. The weighted average grant date fair value of stock units granted during the years ended December 31, 2015, 2014 and 2013 was \$24.91, \$22.73 and \$21.30, respectively. The total fair value of stock units that vested during the years ended December 31, 2015, 2014 and 2013 was \$28.7 million, \$34.1 million and \$22.6 million, respectively.

A summary of stock units as of December 31, 2015 and changes during the year are presented below:

[43] Stock Units	As of December 31, 2015		
Stock units	Stock units (in thousands)	Weighted average contractual term (in years)	Aggregate intrinsic value (\$ 1,000)
Outstanding at January 1, 2015	9,160		
Granted	1,691		
Vested	(1,153)		
Forfeited	(742)		
<b>Outstanding at December 31, 2015</b>	<b>8,956</b>	<b>2.46</b>	<b>247,757</b>
<b>Vested and expected to vest at December 31, 2015</b>	<b>7,298</b>	<b>2.27</b>	<b>189,560</b>

### Compensation Expense

Share-based compensation expense before taxes for the years ended December 31, 2015, 2014 and 2013 totaled approximately \$27.6 million, \$42.2 million and \$37.9 million, respectively, as shown in the table below. The excess tax benefit realized for the tax deductions of the share-based payment arrangements totaled \$3.3 million, \$1.6 million and \$3.1 million, respectively, for the years ended December 31, 2015, 2014 and 2013.

[44] Compensation Expense	Years Ended December 31		
	2015	2014	2013
<b>\$ 1,000</b>			
Cost of sales	2,460	2,726	3,337
Research and development	6,037	6,650	7,632
Sales and marketing	6,180	8,290	10,412
General and administrative	12,890	24,522	16,554
<b>Share-based compensation expense</b>	<b>27,567</b>	<b>42,188</b>	<b>37,935</b>
Less: income tax benefit	6,511	9,685	8,832
<b>Net share-based compensation expense</b>	<b>21,056</b>	<b>32,503</b>	<b>29,103</b>

Total share-based compensation expense in 2015 was lower compared to 2014 following a re-assessment on stock units with performance criteria. Total share-based compensation expense in 2014 was higher compared to 2013 due to incremental expense of \$ 1.4 million recognized in connection with retirement provisions for Supervisory Board members. No share-based compensation cost was capitalized in inventory in 2015, 2014 or 2013 as the amounts were not material.

## 21. Employee Benefits

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 \$ 2.4 million, \$ 2.1 million and \$ 1.7 million for the years ended December 31, 2015, 2014 and 2013, respectively. In 2013, the total expense was lower partially due to matching amounts which were funded from forfeited amounts. We also have a defined contribution plan which covers certain executives. 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, 2015, 2014 and 2013.

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 \$ 6.6 million at December 31, 2015 and \$ 5.0 million at December 31, 2014, and is included as a component of other long-term liabilities on the accompanying consolidated balance sheets.

## 22. Related Party Transactions

We had a 100% interest in QIAGEN Finance (Luxembourg) S.A. (QIAGEN Finance), which was established for the purpose of issuing convertible debt. As discussed in Note 10, QIAGEN Finance was a variable interest entity for which we did not hold any variable interests and were not the primary beneficiary, thus it was not consolidated. Accordingly, the convertible debt was not included in the consolidated statements of QIAGEN N.V., though QIAGEN N.V. did report the full obligation of the debt through its liabilities to QIAGEN Finance. As of December 31, 2014, we had loans payable to QIAGEN Finance of \$ 130.5 million, accrued interest due to QIAGEN Finance of \$ 3.9 million, and amounts receivable from QIAGEN Finance of \$ 3.0 million. The amounts receivable were related to subscription rights which were recorded net in the equity of QIAGEN N.V. as paid-in capital. As discussed in Note 15, during 2015 we repaid the loan to QIAGEN Finance and repurchased the warrant agreement with QIAGEN Finance.

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.

### [45] Related Party Transactions

	As of December 31,		For the years ended December 31,		
	2015	2014	2015	2014	2013
<b>\$ 1,000</b>					
Net sales	—	—	418	1,567	6,193
Reimbursements against research and development costs	—	—	2,032	—	—
Accounts receivable	1,209	1,797	—	—	—
Accounts payable	471	1,397	—	—	—
Loans receivable, including interest	7,472	—	—	—	—

During 2015 we entered into two loan agreements with companies in which we also hold an interest for \$ 5.0 million and € 2.0 million (\$ 2.4 million), bearing interest at 6 % and 7 % and are due in January 2020 and June 2019, respectively. The loans were made for general business purposes and no amounts were repaid in 2015. In the first quarter of 2016 we entered into a short-term \$ 0.6 million loan arrangement with another cost-method investee.

## Selected Subsidiaries

The following is a list of the Registrant's subsidiaries as of December 31, 2015, other than certain subsidiaries that did not in the aggregate constitute a significant subsidiary.

### [46] QIAGEN Subsidiaries

As of December 31, 2015

Company Name	Jurisdiction of Incorporation
Amnisure International, LLC	USA
Cellestis, LLC	USA
Cellestis Ltd.	Australia
Intelligent Bio-Systems, Inc.	USA
MO BIO Laboratories, Inc.	USA
QIAGEN Aarhus A/S	Denmark
QIAGEN AB	Sweden
QIAGEN AG	Switzerland
QIAGEN Australia Holding Pty. Ltd.	Australia
QIAGEN Benelux BV	Netherlands
QIAGEN Beverly, Inc.	USA
QIAGEN Deutschland Holding GmbH	Germany
QIAGEN Finance (Ireland) 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 Lake Constance GmbH	Germany
QIAGEN Ltd.	UK
QIAGEN Manchester Ltd.	UK
QIAGEN Marseille SA	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 Shenzhen Co. Ltd.	China
QIAGEN S.r.l.	Italy
QIAGEN U.S. Finance Holdings (Luxembourg) S.a.r.l.	Luxembourg
Quanta BioSciences, Inc.	USA
SA Biosciences, LLC	USA

---

# Report Of Independent Registered Public Accounting Firm

The Supervisory Board of QIAGEN N.V.:

We have audited the accompanying consolidated balance sheet of QIAGEN N.V. and subsidiaries ("the Company") as of December 31, 2015, and the related consolidated statements of income, comprehensive income (loss), changes in equity, and cash flows for the year then ended. In connection with our audit of the consolidated financial statements, we have also audited the financial statement schedule as listed in Item 18 (A). These consolidated financial statements and the financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and the financial statement schedule based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of QIAGEN N.V. and subsidiaries as of December 31, 2015, and the results of their operations and their cash flows for the year then ended, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), QIAGEN N.V.'s internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated February 26, 2016 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG AG Wirtschaftsprüfungsgesellschaft  
Düsseldorf, Germany

February 26, 2016

---

# Report Of Independent Registered Public Accounting Firm

The Supervisory Board and Shareholders of QIAGEN N.V. and Subsidiaries

We have audited the accompanying consolidated balance sheets of QIAGEN N.V. and Subsidiaries as of December 31, 2014, and the related consolidated statements of income, comprehensive income (loss), changes in equity and cash flows for each of the two years in the period ended December 31, 2014. Our audits also included the financial statement schedule listed in the Index at Item 18(A). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.



In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of QIAGEN N.V. and Subsidiaries at December 31, 2014, and the consolidated results of their operations and their cash flows for each of the two years in the period ended December 31, 2014, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

February 26, 2015

**Ernst & Young GmbH**  
Wirtschaftsprüfungsgesellschaft  
Düsseldorf, Germany

/s/ Hendrik Hollweg  
Wirtschaftsprüfer  
(German Public Auditor)

/s/ Tobias Schlebusch  
Wirtschaftsprüfer  
(German Public Auditor)

---

# Report Of Independent Registered Public Accounting Firm

The Supervisory Board of QIAGEN N.V.:

We have audited QIAGEN N.V.'s ("QIAGEN" or "the Company") internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying 'Report of Management on Internal Control over Financial Reporting'. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, QIAGEN N.V. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet of QIAGEN N.V. and subsidiaries as of December 31, 2015, and the related consolidated statements of income, comprehensive income (loss), changes in equity, and cash flows for the year then ended and the related financial statement schedule as listed in Item 18(A), and our report dated February 26, 2016 expressed an unqualified opinion on those consolidated financial statements and the related financial statement schedule as listed in Item 18(A).

/s/ KPMG AG Wirtschaftsprüfungsgesellschaft  
Düsseldorf, Germany

February 26, 2016

[47] QIAGEN Key Figures

	2015	2014	2013	2012
<b>\$ 1,000 except per share data</b>				
<b>Results</b>				
Net sales	1,280,986	1,344,777	1,301,984	1,254,456
Operating income	175,693	160,818	63,330	169,814
Net income*	127,103	116,634	69,073	129,506
Basic earnings per share (EPS)*	0.54	0.50	0.30	0.55
Diluted earnings per share (EPS)*	0.54	0.48	0.29	0.54
<b>Research and development</b>				
R & D expenses (\$ million)	147.2	163.6	146.1	122.5
R & D expenses (as % of net sales)	11	12	11	10
R & D employees	1,019	951	820	670
<b>Number of shares (in thousands)</b>				
Weighted average number of common shares used to compute basic net income per common share	233,483	232,644	234,000	235,582
Weighted average number of common shares used to compute diluted net income per common share	237,158	241,538	242,175	240,746
<b>Cash flow</b>				
Cash flow from operations	317,497	287,965	258,957	244,880
Capital expenditures for property, plant and equipment	97,778	86,591	84,468	101,996
Free cash flow (cash flow from operations less capital expenditures)	219,719	201,374	174,489	142,884
<b>Balance sheet</b>				
Total assets	4,189,678	4,454,372	4,088,392	4,087,631
Cash and cash equivalents	290,011	392,667	330,303	394,037
Total long-term liabilities, including current portion	1,360,293	1,496,991	1,032,409	1,101,550
<b>Total equity</b>	<b>2,561,954</b>	<b>2,657,999</b>	<b>2,723,871</b>	<b>2,724,363</b>

\* Attributable to the owners of QIAGEN N.V.

As of December 31

	2011	2010	2009	2008	2007	2006
	1,169,747	1,087,431	1,009,825	892,975	649,774	465,778
	99,588	188,537	180,205	145,662	83,133	100,601
	96,038	144,311	137,767	89,033	50,122	70,539
	0.41	0.62	0.67	0.45	0.30	0.47
	0.40	0.60	0.64	0.44	0.28	0.46
	130.6	126.0	107.9	97.3	64.9	41.6
	11	12	11	11	10	9
	758	740	698	529	461	332
	233,850	232,635	206,928	196,804	168,457	149,504
	239,064	240,483	213,612	204,259	175,959	153,517
	244,779	250,752	216,995	172,998	84,811	101,479
	86,805	79,666	52,179	39,448	34,492	28,995
	157,974	171,086	164,816	133,550	50,319	72,484
	3,729,685	3,878,478	3,769,219	2,810,789	2,775,174	1,212,012
	221,133	828,407	825,557	333,313	347,320	430,357
	725,874	1,118,932	1,171,065	1,128,301	1,220,084	536,738
	<b>2,557,798</b>	<b>2,476,353</b>	<b>2,291,169</b>	<b>1,453,844</b>	<b>1,391,575</b>	<b>566,165</b>

# Glossary

## A

---

**Allele** An alternative form of a gene found in a person's DNA. An individual inherits two alleles for each gene, one from each parent. Alleles can be associated with healthy inherited traits or with risk for diseases.

**Amplification** Making multiple copies of nucleic acid sequences to enable analysis for diagnostic or identification purposes. Various technologies are used to amplify genomic information in the laboratory, the most popular being the Polymerase Chain Reaction (PCR).

**Applied Testing** Use of Sample & Assay Technologies for professional applications beyond healthcare and research, including human identification and forensics, veterinary testing, food safety and other uses in non-human health applications.

**Assay** Analysis to determine the presence, absence, or quantity of one or more components; a test used in this analysis.

**Autoimmune disease** An illness that occurs when the body tissues are attacked by its own immune system.

**Automation** Use of technologies to take the place of time-consuming manual work. For instance, instruments can carry out complete workflows for sample preparation, assay set-up or sequencing of nucleic acids. Automation accelerates laboratory processes, reduces errors and saves money.

## B

---

**Bacillus Calmette-Guérin (BCG)** A vaccine against tuberculosis.

**Bioinformatics** Software tools to generate useful biological knowledge and store, retrieve, organize and analyze biological data.

**Biomarker** Molecules found in the body that indicate a specific biological condition such as a disease, predisposition to a disease, or response to drugs, which are increasingly used to personalize medical treatments for various conditions.

**Biomedical research** Scientific investigation of any matter related to living or biological systems. "Biomedical" usually denotes an emphasis on problems related to human health and diseases.

**BRAF** A human gene that makes a protein called B-Raf. The B-Raf protein is involved in sending signals inside cells, which are involved in directing cell growth. It's been shown to be faulty (mutated) in human cancers.

## C

---

**CE mark** A mandatory mark, officially called "CE marking," that designates products as meeting safety, health and environmental requirements for the European Economic Area (EEA). The CE mark is a precondition to market products that can be used for *in vitro* diagnostics in Europe, and is also accepted by many other countries outside of Europe.

**Clinical trial** A research study involving patients or human subjects. The most common clinical trials evaluate new drugs, medical devices, biologics, or other patient interventions in scientifically controlled settings, and are required for regulatory approval of new therapies or diagnostics.

**Companion diagnostics** A key tool for personalized medicine. Companion diagnostics are tests administered ahead of, or in combination with, individual drug therapies, allowing physicians to assess the likely outcome and safety, and eliminating a "trial and error" approach to treatment of disease.

**Consumables** Expendable kits that contain all necessary components such as enzymes, chemical reagents or laboratory plasticware needed to process a specified number of samples or to perform a molecular test to detect and analyze defined targets of interest. Consumable products also include bioinformatics software to analyze, interpret and report the test results.

**CT** *Chlamydia trachomatis*, a disease-causing bacteria. *Chlamydia* infections are the most common bacterial sexually transmitted infections in humans and are the leading cause of infectious blindness worldwide.

**Cytology** Study of cells and their structure, function, multiplication and pathology.

**Cytomegalovirus infection (CMV)** A member of the herpes virus group, which also includes herpes simplex virus, varicella-zoster virus (which causes chickenpox) and Epstein-Barr virus (which causes infectious mononucleosis). These viruses share a

characteristic ability to remain dormant within the body over a long period.

## D

**DNA** Deoxyribonucleic acid is a molecule seen as a basic building block of life. It contains genetic information including the instructions needed for an organism to develop, survive and reproduce. In DNA, two strands form a double helix structure built up from the four nucleotides, or “bases,” adenine, cytosine, guanine and thymine (A, C, G, and T).

**DNA methylation** A type of chemical modification, where DNA acts as an “on” and “off” switch for individual genes. Methylation patterns can be analyzed to diagnose conditions and determine the presence or absence of disease.

**DNA sequencing** The process used to obtain the sequential DNA arrangement of the nucleotides, or “bases,” A, C, G and T. The DNA sequence carries information that a cell needs to assemble protein and RNA molecules and is important in investigating the functions of genes.

**Drug target** The biological target for a medicine to act in the body and fight disease.

## E

**Epstein-Barr virus (EBV)** A virus of the herpes family, and one of the most common viruses in humans. It is best known as the cause of infectious mononucleosis. It is also called human herpesvirus 4 (HHV-4).

**Enzyme-linked immunosorbent assay (ELISA)** A test that uses antibodies and color change to identify a substance.

**Epigenetics** A research area devoted to the analysis of hereditary factors that may have an impact on the phenotype of an organism or its gene expression, but are not associated with changes in the underlying DNA sequence. A key mechanism in epigenetics is DNA methylation.

**Exosomes** Exosomes are a key part of the body’s complex communication system, transferring genetic instructions by carrying nucleic acids and proteins between cells. These microvesicles are shed under both normal and pathological conditions and can be isolated from biofluids such as blood, urine and cerebrospinal fluid. Exosomes hold great promise for biomarker discovery and for personalized healthcare diagnostics.

## F

**FDA** The Food and Drug Administration is an agency of the U.S. Department of Health and Human Services responsible for regulating drugs, medical devices, biologicals such as vaccines, food, dietary supplements, blood products, radiation-emitting devices, veterinary products and cosmetics in the United States.

**FFPE** Formalin-fixed, paraffin-embedded: a standard method of preparing and storing biological materials. Tissue samples are fixed (preserved) with the chemical formalin and embedded in wax. Ultrathin sections are then sliced from the FFPE sample to ex-

tract DNA or RNA for molecular testing in research or diagnostics.

**Forensics** Application of scientific techniques to legal matters – for example, analysis of physical evidence from crime scenes or use of DNA evidence for identification of victims or perpetrators.

## G

**Gene expression** Transfer of genetic information to its active form, usually from DNA via RNA (transcription) into proteins (translation).

**Gene panel** An advanced assay technology to detect multiple genes or variants in one test. Using next-generation sequencing, a gene panel might target 20, 40 or 100 different genes or mutations involved in a particular kind of cancer or other conditions. In personalized healthcare, gene panels help to guide the treatment of each patient’s unique disease.

**Gene silencing** Repression of gene expression, especially using the recently discovered mechanism of RNAi (RNA interference). siRNA duplexes can be designed to target and repress expression of specific genes.

**Genome** The entire genetic information of an organism. In most organisms it consists of DNA; in some viruses it can consist of RNA.

**Genomic DNA** A representative sample of DNA contained in a genome.

**Genomics** Scientific study of genes and their role in an organism's structure, growth, health, disease, ability to resist disease, etc.

**Genotyping** Genetic fingerprinting, DNA testing, DNA typing, and DNA profiling – study or testing of variations in the genetic information among different individuals.

**GMO** Genetically-modified organisms.

## H

---

**HAI** Healthcare-associated infection. Typically transmitted in hospitals or nursing care facilities, pathogens known as HAIs pose a potentially lethal danger to already vulnerable patients. Healthcare institutions face a large economic burden treating HAIs and preventing contagion.

**Hepatitis B** An infectious inflammatory illness of the liver caused by the hepatitis B virus (HBV).

**Hepatitis C** An infectious disease affecting primarily the liver, caused by the hepatitis C virus (HCV).

**High-throughput screening** Testing of large numbers of samples, often simultaneously.

**Histopathology** The microscopic examination of tissue in order to study the manifestations of disease.

**HIV** The virus that causes acquired immune deficiency syndrome (AIDS); it replicates in and kills the helper T cells.

**HLA** Human leukocyte antigen is a gene product of the major histocompatibility complex that influences immune response. These antigens play an important role in human organ transplantation, transfusions in refractory patients and certain disease associations.

**HPV** A virus identified as a necessary factor in the development of nearly all cases of cervical cancer in women. Approximately 130 human papillomavirus (HPV) types have been identified. Persistent infection with one of 15 “high-risk” subtypes of sexually transmitted HPV may lead to potentially precancerous lesions and can progress to invasive cancer.

**Hybrid capture** Proprietary technology used to detect various infections such as HPV, chlamydia trachomatis (CT), Neisseria gonorrhoea (GC) and cytomegalovirus (CMV). In “hybrid capture,” RNA probes bind to DNA in the targeted virus or bacterium, forming a “hybrid.” This hybrid is then “captured” by an antibody added to the solution. In a later step, additional antibodies that produce light in the presence of hybrids are introduced. They bind to the hybrids, resulting in the emission of light that is measured by an instrument called a luminometer. The amount of light detected indicates the amount of target DNA present.

## I

---

**IGRA** Abbreviation for *interferon gamma release assay*, a class of modern tests for detection of tuberculosis infections. Thereby, extracted components of TB bacteria are added to a blood sample. If the pa-

tient's immune system has been exposed to the disease, T-cells in the blood sample are re-stimulated and begin releasing interferon-gamma, whose concentration can be later measured using a specialized laboratory instrument. The underlying technology can also be used to detect other infections.

**Immunoassay** Biochemical test that measures concentration of a specific antibody in a biological liquid, typically serum or urine, using the reaction of an antibody or antibodies to its antigen. The assay takes advantage of the specific binding of an antibody to its antigen.

**Infectious disease** Any disease caused by the entrance, growth, and multiplication of microorganisms in the body; a germ disease.

**Instrument** A device that performs parts or all of the processes in a molecular testing workflow, such as sample preparation or sequencing of nucleic acids. Instruments can be single-purpose, multi-purpose or integrated complete solutions for laboratories, either in research or diagnostics.

**In vitro diagnostics** These tests, known as IVD, are medical devices intended to perform diagnoses from assays in a laboratory test tube, or more generally in a controlled environment outside a living organism. In Latin, *in vitro* means “in glass.”

## L

---

**Laboratory-developed tests** *In vitro* diagnostic tests that are developed, validated and used for in-house pathology and diagnostic purposes. LDTs are intended for use



only by the laboratory entity where they are developed, unlike the majority of commercially marketed laboratory tests which are manufactured by medical device companies and sold to laboratories, hospitals or physicians' offices, and must be cleared or approved by the Food and Drug Administration.

**Latent tuberculosis** A patient is infected with *Mycobacterium tuberculosis*, but does not have active tuberculosis disease. The main risk is that approximately 10% of these patients will go on to develop active tuberculosis at a later stage of their life.

**Listeria** A type of bacterium (*Listeria monocytogenes*) that infects humans and other warm-blooded animals through contaminated food.

**Liquid biopsy** A minimally invasive procedure to collect samples from blood, urine or other body fluids for molecular testing. Traditional tissue samples require costly and sometimes risky surgical biopsies. Liquid biopsies can provide tumor cells, free circulation nucleic acids or RNA from exosomes when a tissue sample is not available or patients need to be tested repeatedly in monitoring a disease.

## M

---

**MicroRNAs (miRNAs)** Single-stranded RNA molecules of about 21–23 nucleotides in length, which regulate gene expression. miRNAs are encoded by genes that are transcribed from DNA but not translated into proteins (non-coding RNA).

**Molecular biology** The study of life processes at the molecular level, typically through the study of nucleic acids (DNA and RNA) and proteins.

**Molecular diagnostics** The use of DNA, RNA and proteins to test for specific health conditions in humans.

**Multiplex assay** A type of laboratory procedure that performs multiple assays concurrently.

**Mutation** Permanent change in hereditary information. Mutations can differ in their extent, take place in the germ line or other tissue types, and occur spontaneously or as a result of environmental factors. Mutations play a special role in certain diseases such as cancer and can serve as biomarkers for the efficacy and/or safety of drugs.

## N

---

**Next-generation sequencing (NGS)** The process of determining the precise order of nucleotides within a DNA molecule. It includes any method or technology that is used to determine the order of the four bases – adenine, guanine, cytosine, and thymine – in a strand of DNA. The advent of NGS has greatly accelerated biological and medical research and discovery.

**Nucleic acid** Single or double-stranded polynucleotides involving RNA or DNA, which are the crucial building blocks of life involved in the storage and expression of genetic information.

## O

---

**Oncogene** An oncogene is a gene that, when mutated or expressed at high levels, helps turn a normal cell into a tumor cell. Examples are PI3K, BRAF, KRAS, BCL-ABL.

## P

---

**Pap smear** The Papanicolaou test (also called Pap smear, Pap test, cervical smear, or smear test) is a cytology-based screening test used to detect premalignant and malignant (cancerous) processes in the cervix.

**Pathogen** A pathogen or infectious agent is a biological agent that causes disease or illness.

**Pathway** A series of metabolic/biological actions among molecules in a cell. An understanding of entire pathways and the complex interactions of all molecules involved – as opposed to the study of individual molecules – is a key to understanding the specifics of many diseases and the development of new diagnostics and drugs.

**PCR** Polymerase chain reaction is the most widely used laboratory technique to amplify DNA or RNA sequences. The temperature of a sample is repeatedly raised and lowered to help heat-stable polymerase enzymes copy the target nucleic acid sequence. PCR can produce a billion copies of the target sequence in a few hours.

**Personalized medicine** Use of information from a patient's genotype, level of gene expression and other clinical data to stratify disease, select a medication or dosage, or initiate a therapeutic or preventive measure that is particularly suited to that patient at the time of administration.

**Pharmacogenomics** Analyzing the entire spectrum of genes that determine drug behavior and sensitivity, pharmacogenomics is concerned with genetic effects on drugs themselves, and with genetic variances that contribute to variable effects of drugs in different individuals.

**Polymerases** Enzymes that catalyze the production of a nucleic acid strand using an existing strand as a template – used in PCR and RT-PCR.

**Predisposition** A genetic effect that influences the observable characteristics of an organism but can be modified by environmental conditions. Genetic testing can identify individuals who are genetically predisposed to certain health problems.

**Primer** A strand of nucleic acid that serves as a starting point for DNA or RNA synthesis. They are required because the enzymes that catalyze replication, DNA polymerases, can only add new nucleotides to an existing strand of DNA.

**PROM** Premature rupture of fetal membranes, a common complication in pregnancy occurring in up to 10% of all women. PROM is characterized by a rupture of the protective amniotic sac and discharge of amniotic fluid before the start of labor. If not diagnosed early, it can lead to compli-

cations such as infections, sepsis, brain damage, premature birth or miscarriage.

**Pyrosequencing** A next-generation DNA sequencing technology based on the “sequencing by synthesis” principle. Pyrosequencing enables decoding of short to medium-length DNA sequences and is highly useful for analyzing DNA methylation patterns.

## R

**Reagent** A chemical substance (other than the specimen) used in conducting a diagnostic test/assay.

**Real-time PCR** Polymerase chain reaction in real time that involves the sequence-specific amplification of DNA molecules using heat-stable polymerase enzymes. It is often used to measure the amount of a specific DNA molecule in a sample.

**Reverse transcription** The process of making a double stranded DNA molecule from a single stranded RNA template through the enzyme, reverse transcriptase.

**RNA** Ribonucleic acid is one of the building blocks of life, included in many types of biologically relevant molecules, especially mRNA (messenger RNA), which is copied from DNA and encodes proteins.

**RNAi** RNA interference is one methodology used to cause gene silencing.

**RT-PCR** Reverse-transcriptase polymerase chain reaction is a technique that transcribes RNA molecules into DNA molecules, which are then amplified by PCR.

## S

**Sensitivity** A statistical measure of how well a test correctly identifies a condition. For example, with a medical test to determine if a person has a certain disease, the sensitivity is the probability that if the person has the disease, the test result will be “positive.” High sensitivity is required when early diagnosis and treatment are beneficial to patients, or when a disease is infectious and screening is useful to containing it.

**siRNA** Short interfering RNA is a specific short sequence of double-stranded RNA (dsRNA) with less than 30 base pairs.

**SNP** Single nucleotide polymorphism – DNA sequence variations occurring when a single nucleotide (A, T, C or G) in the genome differs between members of a species. Variations in DNA sequences can affect how humans develop diseases and respond to pathogens, drugs, vaccines and other agents, and thus serve as potential biomarkers. SNPs are thought to be key enablers in achieving the potential of personalized medicine.

**Specificity** A statistical measure of how well a test correctly identifies the negative cases, those that do not meet the condition under study. For example, specificity in a medical test to determine if a person has a certain disease is the probability that a “negative” result accurately indicates that the person does not have the disease. High specificity is important when the treatment or diagnosis could be harmful to patients mentally and/or physically.

**Swine flu** Any strain of the influenza virus that can be endemic in pigs (swine), and also found in humans. The 2009–2010 pandemic in humans, widely known as “swine flu” or “H1N1,” was due to a strain of influenza. A virus subtype H1N1 that global health authorities viewed as a particularly dangerous threat.

## T

---

**Test kit** An FDA cleared or approved test package that includes all of the reagents necessary to obtain test results and a protocol with instructions for using the test kit.

**Translational medicine** The findings in basic research are more quickly and efficiently translated into medical practice and resulting in faster and better outcomes for patients.

**Tuberculin skin test (TST)**, also known as the *Mantoux test*, is more than 100 years old yet still frequently used to diagnose infections with TB bacteria. During the test, patients receive a specific injection under their skin. After 48 to 72 hours, the puncture is examined for potential swelling and redness as signs of an older or existing TB infection. The test is widely seen to be obsolete, as it produces a high number of false positive results, is subjective and less cost-effective than alternative modern detection methods.

**Trichella** The genus of parasitic roundworms of the phylum Nematoida that cause trichinosis.

## W

---

**Workflow** An orderly series of steps a laboratory must follow to take a sample from raw biological material through isolation and purification, identification and measurement by molecular assays, on to analysis and through final results. Automation systems increasingly move beyond individual lab tasks to focus on enhancing the efficiency of entire workflows.

## Z

---

**Zoonosis** A disease that normally exists in animals but that can infect humans. There are multitudes of zoonotic diseases.

# Service

## Corporate Communications

---

### FOR INVESTORS

Phone worldwide: +49 2103 29 11711

Phone U.S.: +1 240 686 2222

Email: [ir@qiagen.com](mailto:ir@qiagen.com)

[ir.qiagen.com](http://ir.qiagen.com)

### FOR MEDIA

Phone worldwide: +49 2103 29 11826

Phone U.S.: +1 240 686 7425

Email: [pr@qiagen.com](mailto:pr@qiagen.com)

[pr.qiagen.com](http://pr.qiagen.com)

## QIAGEN on the Web


---

 [www.qiagen.com](http://www.qiagen.com)

 [www.facebook.com/QIAGEN](http://www.facebook.com/QIAGEN)

 [www.twitter.com/QIAGEN](http://www.twitter.com/QIAGEN)

 [www.linkedin.com/company/QIAGEN](http://www.linkedin.com/company/QIAGEN)

 [www.youtube.com/QIAGEN](http://www.youtube.com/QIAGEN)

## Credits

---

### CONCEPT AND DESIGN

3st kommunikation, Mainz

[www.3st.de](http://www.3st.de)

### PRINTING

Eberl Print GmbH

[www.eberl.de](http://www.eberl.de)

### PHOTOGRAPHY

Andreas Fechner

[www.andreasfechner.de](http://www.andreasfechner.de)

### EDITOR

Przemyslaw Jedrysik

## Financial Calendar

---

### APRIL 27, 2016

First Quarter 2016 Results

### JUNE 21, 2016

Annual General Meeting of Shareholders of QIAGEN N.V.

### JULY 28, 2016

Second Quarter 2016 Results

### NOVEMBER 2, 2016

Third Quarter 2016 Results

### JANUARY 2017

Fourth Quarter 2016 Results

## Publication Date

---

February 2016.

## Trademarks

---

Our name together with our logo is registered as a trademark in the United States and a number of other countries: QIAGEN®.

For a complete list of QIAGEN's trademarks and disclaimers, please refer to QIAGEN's webpage under [www.qiagen.com/trademarks\\_disclaimers.aspx](http://www.qiagen.com/trademarks_disclaimers.aspx)

In this annual report QIAGEN uses the term molecular diagnostics. The use of this term is in reference to certain countries, such as the United States, limited to products subject to regulatory requirements. As of February 2016, QIAGEN molecular diagnostics products included 18 FDA (PMA approved or 510k cleared) products, 17 clinical sample concentrator products (13 kits and 4 instruments), 70 EU CE IVD assays, 10 EU CE IVD sample preparation products, 21 EU CE IVD instruments for sample purification or detection, 32 China CFDA IVD assays and 11 China CFDA IVD instruments.

This Annual Report may also contain trade names or trademarks of companies other than QIAGEN.

© 2016 QIAGEN, all rights reserved.



This document contains detailed financial information about QIAGEN prepared under generally accepted accounting standards in the U.S. (U.S. GAAP) and included in our Form 20-F annual report filed with the U.S. Securities and Exchange Commission. QIAGEN also publishes an Annual Report under IFRS accounting standards, which is available on our website at [www.qiagen.com](http://www.qiagen.com).



---

AGTCACTACTCATCGGCTACAGACTTACGCATCGCGATCGACTACGTCATCTGACTAGCTGAATTATAGCGACGACGCC  
AGTCACTACTCATCGGGACTACGTCATCTGACTAGCTGAATTATAGCGACGACCTACAGACTTACGCATCGC  
TACTGACTGC CGTCATCTGACTAGCTGAATTATAGCGACGACATCGATCGTAGCTGACAGTCACTACTCATCGGGACTACGTCA  
AGCATCGGGACTACGTCATCTGACTAGCTGAATTATAGCGACGCGATCGCGACCACGGAC  
AGTCACTACTCATCGGGACTACGTCATCTGACTAGCTGAATTATAGCGACGACCTACAGACTTACGCATCGCGATCGCC  
CTCATCGGAGTCACTACTACAGACTTACGCATCGCGATCGACTACGTCATCTGACTAGCTGA  
CTCATCGGAGCGCGATCGACTACGTCATCTGACTAGCTGAATTATAGCGACGACGCGACCACGA  
AGTCACTACTCATCGGCTACGC