Bio-Rad Laboratories

ANNUAL REPORT 2015

BIO-RAD


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IVD
BIO-RAD
2
3 mL
IVD

Letter to our Shareholders

It was another year of accomplishment on many fronts for Bio-Rad. During the year we set the stage for continued progress in 2016, and beyond. While reported sales in 2015 would seem to indicate we were going backwards, it was, in fact, a year of dramatic changes in the value of currency in areas of the world where Bio-Rad has a significant market presence. In Europe, for example, the value of the euro declined 10.2% versus the dollar from 2014 to 2015. Similarly, the Japanese yen declined 0.5% and the Russian ruble fell 20.3%. All told, we estimate that $190 million dollars of sales in 2015 were literally lost in translation. Stripping away the effects of currency, we achieved top-line growth of 1.6% on a currency neutral basis. While sales growth was modest

by historical standards, it is a reflection of varying market dynamics for our products around the world. Most acute is in Western Europe where healthcare austerity and a French consolidation of diagnostic laboratories have combined to neutralize the growth we achieved in our life science segment. Eastern European markets also proved challenging in 2015, due to a combination of austerity and protectionist measures.

Our Asia region continued to grow, driven largely by continued expansion of China markets for both our life science and diagnostics products, somewhat offset by slowness in Japan and selected other Asia regions. The Americas, particularly the U.S., did well. Buoyed by a stabilized funding environment for research and a continued understanding of the value of diagnostics to healthcare, this region contributed the largest part of our growth for 2015.

The regional market dynamics from year to year underscore for us the value of geographic diversity and its ability to mitigate localized weakness.

IH-500

Bio-Rad offers a wide range of instruments and reagents used in blood typing and screening that provide both greater reliability—in operation and in results—and state-of-the-art automation. This year we added another instrument to our portfolio, the IH-500 system.

For fast and reliable results in a 24/7 environment, the **IH**-500 system offers automated blood typing and screening for the small- to medium-size transfusion laboratory. The system was introduced to markets outside the U.S. in 2015 and complements our lower-volume and manual products for blood typing and screening as well as our **IH**-1000 platform for higher-volume labs. The **IH**-500 supports our entire range of ID gel cards for ABO blood grouping, reverse testing, phenotype, Rh-subgroups, antibody screening, antibody identification, single antigen testing, direct AHG testing (DAT), and crossmatch. Also during 2015, we launched our **TANGO** infinity® system in the U.S., next in the series following the **TANGO**™ optimo system for automated solid state blood typing and screening.


IH-500
BIO-RAD


BIO-RAD

D-100 SYSTEM

Late in 2015, Bio-Rad's D-100™ Hemoglobin Testing System received clearance from the U.S. Food and Drug Administration (FDA) for A1c testing in the U.S. market.

Introduced earlier in 2015 to markets outside the U.S., the D-100 System is a fully automated instrument that is designed to meet the needs of medium- and high-volume clinical laboratories for hemoglobin A1c testing. Bio-Rad pioneered the use of hemoglobin A1c for monitoring long-term diabetic control. More recently, the test is being adopted as an aid in the diagnosis of diabetes and for identifying individuals who may be at risk of developing diabetes. The D-100 System rapidly delivers A1c results without sacrificing the ability to detect hemoglobin variants and other potentially interfering conditions. Bio-Rad's D-100 provides high throughput, high-quality results, and a simplified workflow for A1c testing.

The introduction of new products also contributed to growth for 2015. Of note is the introduction of the IH-500, a mid-volume platform for blood typing. It was introduced in Europe and other selected markets about mid-year and has been well received. This instrument fills a gap in our product line, complementing our lower-volume and manual offerings on one end and our flagship IH-1000 platform on the high-volume end. We also introduced a new diabetes platform, the D-100,™ for laboratory-based monitoring of hemoglobin A1c to enhance our market leadership position. Initially introduced outside the U.S., we received U.S. Food and Drug Administration (FDA) clearance for the D-100 late in the year. We look forward to begin placing these systems with our customers in the U.S. Historically, hemoglobin A1c has been used as the "gold standard" analyte for monitoring long-term diabetic control. Today, A1c is increasingly being used for the diagnosis of diabetes. Importantly, the ability to discriminate between hemoglobin A1c and its variants is critical to making the correct diagnosis. This is an area that Bio-Rad pioneered.

We also received FDA approval for our HIV assay and launched our Vitamin D assay in the U.S. Both of these assays run on our BioPlex® 2200 automated immunoassay platform. This brings the total available assay panels running on the instrument to 18, comprising 55 assays. With the continued expansion of the

BioPlex 2200 menu and our launch of the system into new geographies such as China, 2015 was a year of unprecedented demand for this innovative platform.

Another important product focus for us over the past few years has been the introduction of Droplet Digital™ PCR (ddPCR™) technology to the research market. We are seeing an increasing number of new and exciting applications for this generational DNA amplification technique. Its utility is found in the ability to encapsulate segments of DNA in individual droplets and to discretely amplify and analyze each reaction. With this capability, researchers are able to collect valuable information, not previously attainable. The value of this technology is fast finding its way into diagnostics, and we recently introduced a CE-IVD version of our QX200™ ddPCR system in Europe and Asia, allowing for its expanded use in clinical diagnostics settings.

Building on the capabilities of droplet technology, we recently entered into a collaboration with Illumina, a leader in next-generation sequencing, to provide its customers with an instrument that is able to encapsulate single cells in droplets. The combination of our platform and an Illumina sequencer will, for the first time, allow researchers to assay thousands of cells individually ... gene expression at a single cell level.

Another investment area for us with this droplet technology is in the diagnosis of cancer. In 2014, we acquired a product in development, a benchtop targeted sequencer designed

ddPCR

Applications for our Droplet Digital PCR (ddPCR) technology continue to grow, resulting in hundreds of peer-reviewed ddPCR publications.

With its ability to partition segments of DNA into thousands of microfluidic droplets and then discretely amplify and analyze each reaction, our ddPCR technology allows researchers to capture valuable information. In the area of cancer research, researchers use ddPCR to detect very small amounts of variant DNA, specifically oncogenic mutant DNA, quickly, inexpensively, and reliably. From developing a ddPCR-based test that could help physicians guide personalized therapy to tracking tumor mutations that cause drug resistance, these advancements are becoming possible. Recently, our QX200 Droplet Digital PCR (ddPCR) System obtained CE IVD marking, making it the first digital PCR system allowed for use as an in vitro diagnostic (IVD) platform in the European Union.


Droplet Generator
Bulk PCR Thermal Cycler
Droplet Reader
1. MAKE DROPLETS
2. CYCLE DROPLETS
3. READ DROPLETS


BIO-RAD
BioPlex® 2200
REF 665-3450
REF 665-3455 (US)
HIV Ag-Ab Reagent Pack
LOT

BIOPLEX® 2200

Complementing our already extensive menu of autoimmune and infectious disease assays for use on our BioPlex 2200 System, Bio-Rad added two more in 2015.

This brings the total number of available assays for the system to 55. Early in 2015 we introduced the BioPlex® 2200 25-OH Vitamin D kit and a few months later we obtained FDA pre-market approval for our BioPlex® 2200 HIV Ag-Ab assay, Bio-Rad's 5th-generation HIV diagnostic test. In addition to the early detection offered by other tests, the 5th-generation BioPlex HIV Ag-Ab assay provides more information by specifically identifying which individual HIV-1 or HIV-2 marker is positive. This additional information may aid a physician in diagnosing if the patient was recently infected. Early treatment of these patients and outreach to those they may have infected reduces the risk of further transmission.

specifically for the diagnostic market, that is capable of sample-to-answer in four hours. We are continuing to make progress on its development and hope to bring a product to market sometime in the next 12 months. These are but a few of the many product introductions and developments of 2015, all of which portend well for the future.

On the operational front, 2015 was one of continued investment in our infrastructure. We have, for several years now, been investing in a common global ERP information system to better manage our growing worldwide complexity. In 2015, we successfully implemented the second deployment of the system, completing implementation for our North American-based operations. We now turn our attention to Europe, which will take all of 2016 to prepare.

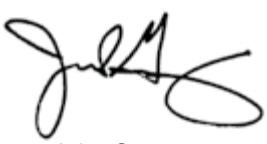
The implementation of this global system gave us the opportunity to consider the structure of our organization and as a result we moved to a more functional operating structure. The two principal changes we made were to globalize our commercial selling operations and our supply chain. It was especially important to get the supply chain structure in place before going too far with ERP. We spent much of the year establishing the structure and filling positions created by this change. We were fortunate to have some good internal strength, allowing us to fill the majority of these positions from within. We see much potential from this new organization.

The product groups now can better focus their attention on our markets and ensure that we continue to develop innovative, quality products for our customers. The new structure of our sales and service organizations should allow us to think more globally and to better serve our increasing number of multinational customers. Finally, we established a new supply chain organization encompassing procurement, manufacturing, and distribution. Functionalizing these areas gives us many opportunities to drive efficiency and effectiveness for the company. It will take some time to see the results, but they will certainly be measurable.

With all the investments we have been making in systems, organization, and new technologies, operating income has been moderated. We continue to believe these investments are in our best interests, for the long term growth and prosperity of the Company.

Thank you for your interest in Bio-Rad.

Norman Schwartz
PRESIDENT



John Goetz
CHIEF OPERATING OFFICER

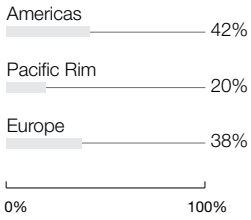
John Goetz
CHIEF OPERATING OFFICER

Norman Schwartz
PRESIDENT

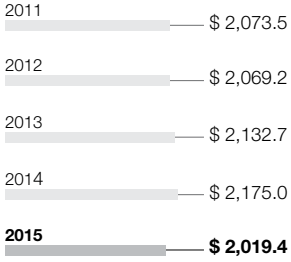
2015 Financial Highlights

In our seventh decade of operation, we have never lost sight of the principles that have brought us success.

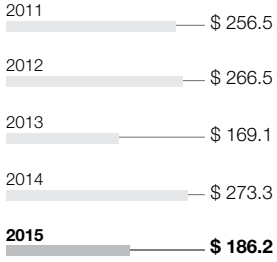
FIVE-YEAR RECORD (IN MILLIONS, EXCEPT FOR RETURN ON SALES AND PER SHARE DATA)	2011	2012	2013	2014	2015
Net Sales	$ 2,073.5	$ 2,069.2	$ 2,132.7	$ 2,175.0	**$ 2,019.4**
Gross Profit	$ 1,178.8	$ 1,155.2	$ 1,178.5	$ 1,178.5	**$ 1,121.7**
R & D Expense	$ 177.6	$ 209.2	$ 211.0	$ 220.3	**$ 193.0**
Net Income Attributable to Bio-Rad	$ 179.0	$ 165.5	$ 77.8	$ 88.8	**$ 113.1**
Return On Sales	8.6%	8.0%	3.6%	4.1%	**5.6%**
Book Value Per Share	$ 61.98	$ 70.75	$ 75.99	$ 75.17	**$ 84.83**
Basic Earnings Per Share	$ 6.39	$ 5.85	$ 2.72	$ 3.08	**$ 3.87**
Cash Flow From Operations	$ 256.5	$ 266.5	$ 169.1	$ 273.3	**$ 186.2**



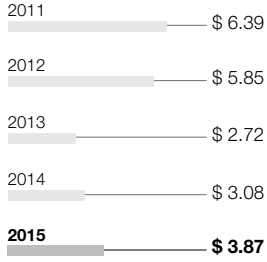
2015 SALES BY REGION



NET SALES
(IN MILLIONS)



CASH FLOW FROM OPERATIONS
(IN MILLIONS)



BASIC EARNINGS PER SHARE

About Bio-Rad

Since the company was founded over six decades ago, Bio-Rad has continued to provide the healthcare industry with innovative and useful products that help life science researchers accelerate the discovery process and medical diagnostic labs obtain faster, better results. Throughout our existence, we have built long-lasting customer relationships that help advance our research and development efforts in the introduction of new products and solutions. Today, Bio-Rad is a global leader, with a team of over 7,800 employees and a global network of operations that serves our life science research and clinical diagnostics customers, helping people live longer, healthier lives.

LIFE SCIENCE RESEARCH

Our Life Science Group offers a wide range of instruments, software, consumables, reagents, and content for the growing fields of cell biology, gene expression, protein purification, protein quantitation, drug discovery and manufacture, food safety, and science education. Bio-Rad is among the top five life science companies worldwide.

Our products and solutions are based on technologies used to separate, purify, identify, analyze, and amplify biological materials such as antibodies, proteins, nucleic acids, cells, and bacteria. Technologies and applications include electrophoresis, imaging, multiplex immunoassay, chromatography, microbiology, protein function analysis, transfection, flow cytometry and cell sorting, amplification, and real-time and digital PCR. Bio-Rad products support research and applied science in laboratories throughout the world.

CLINICAL DIAGNOSTICS

The Clinical Diagnostics Group is a leading in-vitro diagnostics supplier, delivering a large portfolio of innovative products to clinical laboratories worldwide. Bio-Rad is the global leader in clinical quality control products, services, and information systems. These products ensure the accuracy and validity of clinical test results and are used by more clinical laboratories than products from any other company. Bio-Rad's other diagnostic products and systems leverage a broad range of technologies and deliver high-value clinical information in the blood transfusion, diabetes monitoring, autoimmune, and infectious disease testing markets and are used to support the diagnosis, monitoring, and treatment of diseases and other medical conditions.

Bio-Rad manufactures and markets more than 10,000 products across a wide array of applications. From cell biology and the study of proteins to the screening of blood and diagnostic tests for a variety of disorders, 80 percent of our sales are products in which we have a leading position in the market.

SYNERGIES

Established a few years ago, our Digital Biology Group is a leader in digital genomics, delivering innovative technologies to advance research and diagnostic capabilities with intuitive tools that provide digital answers to complex biological questions. Driven by Bio-Rad's core droplet partitioning technology, we are enabling breakthroughs in the areas of liquid biopsy, cancer genotyping, biomarker detection, environmental monitoring, prenatal testing, pathogen detection, and single-cell sequencing. This broad capability for sensitive and precise nucleic acid detection and quantification positions Bio-Rad to deliver to both its life science and diagnostics customers high-value precision diagnostics to enable the promise of personalized medicine.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the year ended December 31, 2015

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number 1-7928

BIO-RAD LABORATORIES, INC.

(Exact name of registrant as specified in its charter)

Delaware	94-1381833
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1000 Alfred Nobel Drive, Hercules, California	94547
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (510) 724-7000

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Class A Common Stock Par Value $0.0001 per share	New York Stock Exchange
Class B Common Stock Par Value $0.0001 per share	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: NONE

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☒ Yes ☐ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ☐ Yes ☒ No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). ☒ Yes ☐ No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated file	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). ☐ Yes ☒ No

As of June 30, 2015, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the Registrant's Class A Common Stock held by non-affiliates was approximately $3,078,497,167 and the aggregate market value of the registrant's Class B Common Stock held by non-affiliates was approximately $47,647,582.

As of February 16, 2016, there were 24,236,681 shares of Class A Common Stock and 5,125,441 shares of Class B Common Stock outstanding.

Documents Incorporated by Reference

	Document	Form 10-K Parts
(1)	Definitive Proxy Statement to be mailed to stockholders in connection with the registrant's 2016 Annual Meeting of Stockholders (specified portions)	III

BIO-RAD LABORATORIES, INC.

FORM 10-K DECEMBER 31, 2015

TABLE OF CONTENTS

INFORMATION RELATING TO FORWARD-LOOKING STATEMENTS

Other than statements of historical fact, statements made in this Annual Report include forward-looking statements, such as statements with respect to our future financial performance, operating results, plans and objectives that involve risk and uncertainties. Forward-looking statements generally can be identified by the use of forward-looking terminology, such as "believe," "expect," "may," "will," "intend," "estimate," "continue," or similar expressions or the negative of those terms or expressions. Such statements involve risks and uncertainties, which could cause actual results to vary materially from those expressed in or indicated by the forward-looking statements. We have based these forward-looking statements on our current expectations and projections about future events. However, actual results may differ materially from those currently anticipated depending on a variety of risk factors including but not limited to those identified under "Item 1A, Risk Factors" of this Annual Report. We caution you not to place undue reliance on forward-looking statements, which reflect an analysis only and speak only as of the date hereof. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, except as required by law.

PART I.

ITEM 1. BUSINESS

General

Founded in 1952 and incorporated in 1957, Bio-Rad Laboratories, Inc. (referred to in this report as "Bio-Rad," "we," "us," and "our") was initially engaged in the development and production of specialty chemicals used in biochemical, pharmaceutical and other life science research applications. We entered the field of clinical diagnostics with the development of our first test kit based on separation techniques and materials developed for life science research. Through internal research and development efforts and acquisitions we have expanded into various markets. Today, Bio-Rad manufactures and supplies the life science research, healthcare, analytical chemistry and other markets with a broad range of products and systems used to separate complex chemical and biological materials and to identify, analyze and purify their components.

As we broadened our product lines, we also expanded our geographical market. We have direct distribution channels in over 30 countries outside the United States through subsidiaries whose focus is sales, customer service and product distribution. In some regions, sales efforts are supplemented by distributors and agents.

Description of Business

Business Segments

Today, Bio-Rad operates in two industry segments designated as Life Science and Clinical Diagnostics. Both segments operate worldwide. Our Life Science segment and our Clinical Diagnostics segment generated 34% and 65%, respectively, of our net sales for the year ended December 31, 2015. We generated approximately 36% of our consolidated net sales for the year ended December 31, 2015 from U.S. sales and approximately 64% from sales in our remaining worldwide markets.

For a description of business and financial information on industry and geographic segments, see Note 14 of Item 8 of Part II of this report.

Life Science Segment

Our Life Science segment is at the forefront of discovery, creating advanced tools to answer complex biological questions. We are a leader in the life sciences market and develop, manufacture and market a range of more than 5,000 reagents, apparatus and laboratory instruments that serve a global customer base. Many of our products are used in established research techniques, biopharmaceutical production processes and food testing regimes. These

techniques are typically used to separate, purify and identify biological materials such as proteins, nucleic acids and bacteria within a laboratory or production setting. We focus on selected segments of the life sciences market in proteomics (the study of proteins), genomics (the study of genes), biopharmaceutical production, cell biology and food safety. We estimate that the worldwide market for products in these selected segments was approximately $8 billion. Our principal life science customers include universities and medical schools, industrial research organizations, government agencies, pharmaceutical manufacturers, biotechnology researchers, food producers and food testing laboratories.

Clinical Diagnostics Segment

Our Clinical Diagnostics segment designs, manufactures, sells and supports test systems, informatics systems, test kits and specialized quality controls that serve clinical laboratories in the global diagnostics market. Our products currently address specific niches within the in vitro diagnostics (IVD) test market, and we seek to focus on the higher margin, higher growth segments of this market.

We supply more than 3,000 different products that cover more than 300 clinical diagnostic tests to the IVD test market. We estimate that the worldwide sales for products in the markets we serve were approximately $10 billion. IVD tests are conducted outside the human body and are used to identify and measure substances in a patient's tissue, blood or urine. Our products consist of reagents, instruments and software, typically provided to our customers as an integrated package to allow them to generate reproducible test results. Revenue in this business is highly recurring, as laboratories typically standardize test methodologies, which are dependent on a particular supplier's equipment, reagents and consumable products. An installed base of diagnostic test systems therefore typically creates an ongoing source of revenue through the sale of test kits for each sample analyzed on an installed system. Our principal clinical diagnostic customers include hospital laboratories, reference laboratories, transfusion laboratories and physician office laboratories.

Raw Materials and Components

We utilize a wide variety of chemicals, biological materials, electronic components, machined metal parts, optical parts, computing and peripheral devices. Most of these materials and components are available from numerous sources, and generally we have not experienced difficulty in securing adequate supplies. However, in certain instances we acquire components and materials from a sole supplier. Due to the regulatory environment in which we operate, we may be unable to quickly establish additional or replacement sources for some components or materials.

Patents, Trademarks and Licenses

We own numerous U.S. and international patents and trademarks. We also pay royalties on the sales of certain products under several patent license agreements. We view these patents, trademarks and license agreements as valuable assets; however, we believe that our ability to develop and manufacture our products depends primarily on our knowledge, technology and special skills rather than our patent, trademark and licensing positions.

Seasonal Operations and Backlog

Our business is not inherently seasonal. However, the European custom of concentrating vacation during the summer months usually tempers third quarter sales volume and operating income.

For the most part, we operate in markets characterized by short lead times and the absence of significant backlogs. Management has concluded that backlog information is not material to our business as a whole.

Sales and Marketing

We conduct our worldwide operations through an extensive direct sales force and service network, employing approximately 740 sales and service people around the world. Our sales force typically consists of experienced industry practitioners with scientific training, and we maintain a separate specialist sales force for each of our segments. We believe that this direct sales approach allows us to sell a broader range of our products and have more direct contact with our customers.

We also use a range of sales and marketing intermediaries (SMIs) in our international markets, excluding Western Europe and Canada. The types of SMIs we utilize are distributors, agents, brokers and resellers. We have programs and policies in place with our SMIs that require compliance with all applicable laws, including adhering to our anti-corruption standards to ensure a transparent sale to our customers.

Our customer base is broad and diversified. Our worldwide customer base includes (1) prominent university and research institutions, providing us access to more than 150,000 scientists in the United States alone; (2) hospital, public health and commercial laboratories; (3) other leading diagnostic manufacturers; and (4) leading companies in the biotechnology, pharmaceutical, chemical and food industries. In 2015, no single customer accounted for more than three percent of our total net sales. Our sales are affected by a number of external factors. For example, a number of our customers, particularly in the Life Science segment, are substantially dependent on government grants and research contracts for their funding. A significant reduction of government funding has in the past and could in the future have a detrimental effect on the results of this segment.

Most of our international sales are generated by our wholly-owned subsidiaries and their branch offices. Certain of these subsidiaries also have manufacturing facilities. Bio-Rad's international operations are subject to certain risks common to foreign operations in general, such as changes in governmental regulations, import restrictions and foreign exchange fluctuations.

Competition

The markets served by our product groups are highly competitive. Our competitors range in size from start-ups to large multinational corporations with significant resources and reach. We seek to compete primarily in market segments where our products and technology offer customers specific advantages over the competition.

Because of the breadth of its product lines, our Life Science segment does not face the same competitors for all of its products. Competitors in this market include GE Biosciences, Merck Millipore and Thermo Fisher Scientific. We compete primarily based on meeting performance specifications and offering complete solutions.

Major competitors of our Clinical Diagnostics segment include Roche, Abbott Laboratories, Siemens, Danaher, Thermo Fisher, Becton Dickinson, bioMérieux, Ortho Clinical Diagnostics, Tosoh, Immucor and DiaSorin.

Research and Development

We conduct extensive research and development activities in all areas of our business, employing approximately 745 people worldwide in these activities. Research and development has played a major role in Bio-Rad's growth and is expected to continue to do so in the future. Our research teams are continuously developing new products and new applications for existing products. In our development of new products and applications, we interact with scientific and medical professionals at universities, hospitals and medical schools, and within our industry. We spent approximately $193.0 million, $220.3 million and $211.0 million on research and development activities in 2015, 2014 and 2013, respectively.

Regulatory Matters

The development, testing, manufacturing, marketing, post-market surveillance, distribution, advertising and labeling of certain of our products (primarily diagnostic products) are subject to regulation in the United States by the Center for Devices and Radiological Health of the U.S. Food and Drug Administration (FDA) and in other jurisdictions by state and foreign government authorities. FDA regulations require that some new products have pre-marketing clearance or approval by the FDA and require certain products to be manufactured in accordance with FDA's "good manufacturing practice" regulations, to be extensively tested and to be properly labeled to disclose test results and performance claims and limitations. After a product that is subject to FDA regulation is placed on the market, numerous regulatory requirements apply, including, for example, the requirement that we comply with recordkeeping and reporting requirements, such as the FDA's medical device reporting regulations and reporting of corrections and removals. The FDA enforces these requirements by inspection and market surveillance. The FDA has authority to take various administrative and legal actions against us for our, or our products', failure to comply with relevant legal or regulatory requirements, including issuing warning letters, initiating product seizures, requesting or requiring product recalls or withdrawals, and other civil or criminal sanctions, among other things.

We are also subject to additional healthcare regulation and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which we conduct our business. Such laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, privacy and security and physician sunshine laws and regulations. If our operations are found to be in violation of any of such laws or any other governmental regulations that apply to us, we may be subject to penalties, including, without limitation, civil and criminal penalties, damages, fines, the curtailment or restructuring of our operations, exclusion from participation in federal and state healthcare programs and imprisonment, any of which could adversely affect our ability to operate our business and our financial results.

Sales of our products will depend, in part, on the extent to which our products or diagnostic tests using our products will be covered by third-party payors, such as government health care programs, commercial insurance and managed healthcare organizations. These third-party payors are increasingly reducing reimbursements for certain medical products and services. In addition, the U.S. government, state legislatures and foreign governments have continued implementing cost containment programs, including price controls and restrictions on reimbursement. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit our net revenue and results. Decreases in third-party reimbursement for our products or diagnostic tests using our products, or a decision by a third-party payor to not cover our products could reduce or eliminate utilization of our products and have a material adverse effect on our sales, results of operations and financial condition. In addition, healthcare reform measures have been and will be adopted in the future, any of which could limit the amounts that governments will pay for healthcare products and services, which could result in reduced demand for our products or additional pricing pressures.

As a multinational manufacturer and distributor of sophisticated instrumentation, we must meet a wide array of electromagnetic compatibility and safety compliance requirements to satisfy regulations in the United States, the European Union and other jurisdictions.

Our operations are subject to federal, state, local and foreign environmental laws and regulations that govern such activities as transportation of goods, emissions to air and discharges to water, as well as handling and disposal practices for solid, hazardous and medical wastes. In addition to environmental laws that regulate our operations, we are also subject to environmental laws and regulations that create liabilities and clean-up responsibility for spills, disposals or other releases of hazardous substances into the environment as a result of our operations or otherwise impacting real property that we own or operate. The environmental laws and regulations could also subject us to claims by third parties for damages resulting from any spills, disposals or releases resulting from our operations or at any of our properties.

These regulatory requirements vary widely among countries.

Employees

At December 31, 2015, Bio-Rad had approximately 7,770 employees. Approximately eight percent of our approximately 3,100 U.S. employees are covered by a collective bargaining agreement, which will expire on November 8, 2016. Many of our non-U.S. full-time employees, especially in France, are covered by collective bargaining agreements. We consider our employee relations in general to be good.

Available Information

Bio-Rad files annual, quarterly, and current reports, proxy statements, and other documents with the Securities and Exchange Commission (SEC) under the Securities Exchange Act of 1934, as amended. The public may read and copy any materials that we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Also, the SEC maintains an Internet website that contains reports, proxy and information statements, and other information regarding issuers, including Bio-Rad, that file electronically with the SEC. The public can obtain any documents that we file with the SEC at http://www.sec.gov.

Bio-Rad's website address is www.bio-rad.com. We make available, free of charge through our website, our Form 10-Ks, 10-Qs and 8-Ks, and any amendments to these forms, as soon as reasonably practicable after filing with the SEC. The information on our website is not part of this Annual Report on Form 10-K.

ITEM 1A. RISK FACTORS

In evaluating our business and whether to invest in any of our securities, you should carefully read the following risk factors in addition to the other information contained in this Annual Report. We believe that any of the following risks could have a material effect on our business, results of operations or financial condition, our industry or the trading price of our common stock. We operate in a continually changing business environment, and new risks and uncertainties emerge from time to time. We cannot predict these new risks and uncertainties, nor can we assess the extent to which any such new risks and uncertainties or the extent to which the risks and uncertainties set forth below may adversely affect our business, results of operations, financial condition, our industry or the trading price of our common stock.

Our settlement with government agencies in connection with violations by us of the U.S. Foreign Corrupt Practices Act could have a material adverse effect on our business, results of operations and financial condition.

As previously disclosed, we entered into a non-prosecution agreement (NPA) with the U.S. Department of Justice (DOJ) and the Securities and Exchange Commission (SEC) and consented to the entry of an Order by the SEC (SEC Order), effective November 3, 2014, which actions resolved both the DOJ and the SEC investigations into our violations of the U.S. Foreign Corrupt Practices Act (FCPA). Under the terms of the NPA and the SEC Order, we agreed to pay a financial penalty and certain amounts in disgorgement and interest as well as to compliance, reporting and cooperation obligations to be performed for two years.

We cannot be certain that our remediation efforts will be sufficient to comply with the terms of the NPA and the SEC Order. Our failure to comply with the NPA and the SEC Order could result in future actions against us by the DOJ and the SEC. In addition, whether by virtue of disclosure of the NPA and the SEC Order or otherwise, we may be subject to investigations by foreign governments or further claims by third parties arising from conduct subject to the investigation or our other international operations. For additional information regarding further claims by third parties, see Part I, Item 3 of this Annual Report. Many of our customers in our significant international operations are government agencies or state-owned or state-controlled universities, hospitals and laboratories. The disclosure of the NPA and the SEC Order could harm our reputation with these customers, which could materially adversely affect our business, results of operations and financial condition.

Our international operations expose us to additional costs and legal and regulatory risks, which could have a material adverse effect on our business, results of operations and financial condition.

We have significant international operations. We have direct distribution channels in over 30 countries outside the United States, and in 2015 our foreign subsidiaries generated 64% of our net sales. Compliance with complex foreign and U.S. laws and regulations that apply to our international operations increases our cost of doing business. These numerous and sometimes conflicting laws and regulations include, among others, data privacy requirements (particularly with respect to the recent invalidation of the U.S.-European Union safe harbor by the European Court of Justice), labor relations laws, tax laws, anti-competition regulations, import and trade restrictions, export requirements, U.S. laws such as the FCPA and other U.S. federal laws and regulations established by the office of Foreign Asset Control, local laws such as the UK Bribery Act 2010 or other local laws which prohibit corrupt payments to governmental officials or certain payments or remunerations to customers.

Given the high level of complexity of these laws, there is a risk that we may inadvertently breach some provisions, for example, through fraudulent or negligent behavior of individual employees, our failure to comply with certain formal documentation requirements, or otherwise. Our success depends, in part, on our ability to anticipate these risks and manage these challenges through policies, procedures and internal controls. However, we have a dispersed international sales organization, and we use distributors and agents in many of our international operations. This structure makes it more difficult for us to ensure that our international selling operations comply with our global policies and procedures.

Violations of these laws and regulations could result in fines, criminal sanctions against us, our officers or our employees, requirements to obtain export licenses, cessation of business activities in sanctioned countries, implementation of compliance programs, and prohibitions on the conduct of our business. Violations of laws and regulations also could result in prohibitions on our ability to offer our products in one or more countries and could materially damage our reputation, our brand, our international expansion efforts, our ability to attract and retain employees, or our business, results of operations and financial condition. See also our risk factor regarding government regulations below.

The industries and market segments in which we operate are highly competitive, and we may not be able to compete effectively.

The life science and clinical diagnostics markets are each highly competitive. Some of our competitors have merged, and some of our competitors have greater financial resources than we do and are less leveraged than we are, making them better equipped to license technologies and intellectual property from third parties or to fund research and development, manufacturing and marketing efforts. For more information about our competitors, see "Competition" in Part I, Item 1 of this Annual Report. Moreover, competitive and regulatory conditions in many markets in which we operate restrict our ability to fully recover, through price increases, higher costs of acquired goods and services resulting from inflation and other drivers of cost increases. Many public tenders have become more competitive due to governments lengthening the commitments of their public tenders to multiple years, which reduce the number of tenders in which we can participate annually. Because the value of these multiple-year tenders is so high, our competitors have been more aggressive with their pricing. Our failure to compete effectively and/or pricing pressures resulting from competition could adversely affect our business, results of operations and financial condition.

We may not be able to grow our business because of our failure to develop new or improved products.

Our future growth depends in part on our ability to continue to improve our product offerings and develop and introduce new product lines and extensions that integrate technological advances. In particular, we may not be able to keep up with changes in the clinical diagnostics industry, such as the trend toward molecular diagnostics or point-of-care tests. If we are unable to integrate technological advances into our product offerings or to design, develop, manufacture and market new product lines and extensions successfully and in a timely manner, our business, results of operations and financial condition will be adversely affected. We have experienced product launch delays in the past, and may do so in the future. We cannot assure you that our product and process development efforts will be

successful or that new products we introduce will achieve market acceptance. Failure to launch successful new products or improvements to existing products may cause our products to become obsolete, which could harm our business, results of operations and financial condition.

We are subject to foreign currency exchange fluctuations, which could have a material adverse effect on our results of operations and financial condition.

As stated above, a significant portion of our operations and sales are outside of the United States. When we make purchases and sales in currencies other than the U.S. dollars, we are exposed to fluctuations in foreign currencies relative to the U.S. dollar that may adversely affect our results of operations and financial condition. Our international sales are largely denominated in local currencies. As a result, the strengthening of the U.S. dollar negatively impacts our consolidated net sales expressed in U.S. dollars. Conversely, when the U.S. dollar weakens, our expenses at our international sites increase. In addition, the volatility of other currencies, such as the Swiss Franc, Brazilian Real and Russian Ruble, may negatively impact our operations outside of the United States and increase our costs to hedge against currency fluctuations. We cannot assure you that future shifts in currency exchange rates will not have a material adverse effect on our results of operations and financial condition. For further information regarding our foreign exchange risk, see "Foreign currency exchange gains and losses" in Part II, Item 7, and "Foreign Exchange Risk" in Part II, Item 7A of this Annual Report.

We may experience difficulties implementing our new global enterprise resource planning system.

We are engaged in a multi-year implementation of a new global enterprise resource planning system (ERP). The ERP is designed to efficiently maintain our books and records and provide information important to the operation of our business to our management team. The ERP will continue to require significant investment of human and financial resources. In implementing the ERP, we may experience significant delays, increased costs and other difficulties. Any significant disruption or deficiency in the design and implementation of the ERP could adversely affect our ability to process orders, ship product, send invoices and track payments, fulfill contractual obligations or otherwise operate our business. For example, we experienced system implementation issues in our Clinical Diagnostics segment during our first deployment that impacted invoicing and caused an increase in accounts receivable. In our second deployment, which we launched in July 2015, we experienced delays in manufacturing and logistics, which adversely impacted our sales. While we have invested significant resources in planning, project management and training, additional and significant implementation issues may arise, particularly in the next few months as a result of our second deployment. In addition, our efforts to centralize various business processes and functions within our organization in connection with our ERP implementation may disrupt our operations and negatively impact our business, results of operations and financial condition.

Recent changes to our organizational structure and executive management team could negatively impact our business.

We made significant changes to our organizational structure in 2014. We functionalized our manufacturing and selling organizations globally and separated them from our marketing and research and development organizations. Specifically, we combined our international selling organization with our North American selling divisions into one global selling group and consolidated our manufacturing, procurement and logistics operations into one global supply chain group. We also created new management positions to head each of these groups. In addition, we appointed new executives to head each of our Life Science and Clinical Diagnostics segments, and we appointed a Chief Operating Officer. We also restructured our Life Science segment based on functional groups rather than product line divisions. These changes may have unintended consequences, such as distraction of our management and employees, business disruption, attrition of our workforce, inability to attract or retain key employees, and reduced employee morale or productivity.

Our failure to establish and maintain effective internal control over financial reporting could result in material misstatements in our financial statements, our failure to meet our reporting obligations and cause investors to lose confidence in our reported financial information, which in turn could cause the trading price of our common stock to decline.

Maintaining effective internal control over financial reporting is necessary for us to produce reliable financial statements. As previously disclosed, in connection with our assessment of the effectiveness of internal control over financial reporting and the preparation of our financial statements for the year ended December 31, 2013, we identified a material weakness in the design of monitoring controls over operations at certain of our locations both within the United States and overseas, as well as a lack of documentation required to operate these controls appropriately. Although we remediated this material weakness as of December 31, 2014, we cannot assure you that additional material weaknesses in our internal control over financial reporting will not be identified in the future. For example, we previously identified different material weaknesses in internal controls at December 31, 2012 and December 31, 2010, both of which have been remediated.

Such material weaknesses have adversely affected us in the past and could affect us in the future, and the results of our periodic management evaluations and annual auditor attestation reports regarding the effectiveness of our internal control over financial reporting required by Section 404 of the Sarbanes-Oxley Act of 2002. Any failure to maintain new and more precise monitoring controls and improved detection and communication of financial misstatements across all levels of the organization could result in additional material weaknesses, result in material misstatements in our financial statements and cause us to fail to meet our reporting obligations. This could cause us to lose public confidence, and could cause the trading price of our common stock to decline. For further information regarding our controls and procedures, see Part II, Item 9A of this Annual Report.

Breaches of our information systems could have material adverse effect on our business and results of operations.

Through our sales and eCommerce channels, we collect and store confidential information that customers provide to, among other things, purchase products or services, enroll in promotional programs and register on our Web site. We also acquire and retain information about suppliers and employees in the normal course of business. We also create and maintain proprietary information that is critical to our business, such as our product designs and manufacturing processes. Despite recent initiatives to improve our technology systems, such as our enterprise resource planning implementation and the centralization of our global information technology organization, we could experience a significant data security breach. Computer hackers may attempt to penetrate our or our vendors' information systems and, if successful, misappropriate confidential customer, supplier, employee or other business information, such as our intellectual property. Third parties could also gain control of our systems and use them for criminal purposes while appearing to be us. As a result, we could lose existing customers, have difficulty attracting new customers, be exposed to claims from customers, financial institutions, payment card associations, employees and other persons, have regulatory sanctions or penalties imposed, incur additional expenses or lose revenues as a result of a data privacy breach, or suffer other adverse consequences. Our operations and ability to process sales orders, particularly through our eCommerce channels, could also be disrupted. Any significant breakdown, intrusion, interruption, corruption, or destruction of our systems, as well as any data breaches, could have a material adverse effect on our business and results of operations. See also our risk factors regarding our ERP implementation above and our information technology systems below.

Risks relating to intellectual property rights may negatively impact our business.

We rely on a combination of copyright, trade secret, patent and trademark laws and third-party nondisclosure agreements to protect our intellectual property rights and products. However, we cannot assure you that our intellectual property rights will not be challenged, invalidated, circumvented or rendered unenforceable, or that meaningful protection or adequate remedies will be available to us. For instance, unauthorized third parties have attempted to copy our intellectual property, reverse engineer or obtain and use information that we regard as

proprietary, or have developed equivalent technologies independently, and may do so in the future. Additionally, third parties have asserted patent, copyright and other intellectual property rights to technologies that are important to us, and may do so in the future. If we are unable to license or otherwise access protected technology used in our products, or if we lose our rights under any existing licenses, we could be prohibited from manufacturing and marketing such products. From time to time, we also must enforce our patents or other intellectual property rights or defend ourselves against claimed infringement of the rights of others through litigation. As a result, we could incur substantial costs, be forced to redesign our products, or be required to pay damages to an infringed party. Any of the foregoing matters could adversely impact our business, results of operations and financial condition.

Global economic conditions could continue to adversely affect our operations.

In recent years, we have been faced with very challenging global economic conditions. Further deterioration in the global economic environment may result in decreased demand for our products, increased competition, downward pressure on the prices for our products and longer sales cycles. A weakening of macroeconomic conditions may also adversely affect our suppliers, which could result in interruptions in supply in the future. We have also experienced delays in collecting receivables in certain countries in Western Europe, and we may experience similar delays in these and other countries or regions experiencing liquidity problems. As of December 31, 2015, we had accounts receivable, net of allowance for doubtful accounts, in Spain, Italy, Greece and Portugal of $40.7 million. In addition, a slowing of growth in the Chinese economy and in emerging markets, especially those oil-producing countries that have been affected by the recent decline in oil prices, could adversely affect our business, results of operations or financial condition.

Reductions in government funding and the capital spending programs of our customers could have a material adverse effect on our business, results of operations or financial condition.

Our customers include universities, clinical diagnostics laboratories, government agencies, hospitals and pharmaceutical, biotechnology and chemical companies. The capital spending programs of these institutions and companies have a significant effect on the demand for our products. Such programs are based on a wide variety of factors, including the resources available to make such purchases, the availability of funding from grants by governments or government agencies, the spending priorities for various types of equipment and the policies regarding capital expenditures during industry downturns or recessionary periods. If government funding to our customers were to decrease, or if our customers were to decrease or reallocate their budgets in a manner adverse to us, our business, results of operations or financial condition could be materially and adversely affected. For more information on our customers, see “Sales and Marketing” in Part I, Item 1 of this Annual Report.

Changes in the healthcare industry could have an adverse effect on our business, results of operations and financial condition.

There have been, and will continue to be, significant changes in the healthcare industry in an effort to reduce costs. These changes include:

- The trend towards managed care, together with healthcare reform of the delivery system in the United States and efforts to reform in Europe, has resulted in increased pressure on healthcare providers and other participants in the healthcare industry to reduce selling prices. Consolidation among healthcare providers has resulted in fewer, more powerful groups, whose purchasing power gives them cost containment leverage. In particular, there has been a consolidation of blood transfusion centers, as well as an industry decline in the number of blood transfusions. These industry trends and competitive forces place constraints on the levels of overall pricing, and thus could have a material adverse effect on our gross margins for products we sell in clinical diagnostic markets.

- Third party payors, such as Medicare and Medicaid in the United States, have reduced their reimbursements for certain medical products and services. Our Clinical Diagnostics business is impacted by the level of reimbursement available for clinical tests from third party payors. In the United States payment for many

diagnostic tests furnished to Medicare fee-for-service beneficiaries is made based on the Medicare Clinical Laboratory Fee Schedule (CLFS), a fee schedule established and adjusted from time to time by the Centers for Medicare and Medicaid Services (CMS). Some commercial payors are guided by the CLFS in establishing their reimbursement rates. Clinicians may decide not to order clinical diagnostic tests if third party payments are inadequate, and we cannot predict whether third party payors will offer adequate reimbursement for tests utilizing our products to make them commercially attractive. Legislation, such as the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (PPACA) and the Middle Class Tax Relief and Job Creation Act of 2012, has reduced the payments for clinical laboratory services paid under the CLFS. In addition, the Protecting Access to Medicare Act of 2014 will make significant changes to the way Medicare will pay for clinical laboratory services, which will further reduce reimbursement rates.

- The PPACA has also imposed a 2.3% excise tax on the sales of certain medical devices in the U.S., which we are required to pay on most of our United States Clinical Diagnostic sales. However, the Consolidated Appropriations Act, 2016 (Pub. L. 114-113), signed into law on December 18, 2015, includes a two year moratorium on the medical device excise tax during the period beginning on January 1, 2016, and ending on December 31, 2017.

To the extent that the healthcare industry seeks to address the need to contain costs stemming from reform measures such as those contained in the PPACA and the Protecting Access to Medicare Act of 2014, or in future legislation, by limiting the number of clinical tests being performed or the amount of reimbursement available for such tests, our business, results of operations and financial condition could be adversely affected. If these changes in the healthcare markets in the United States and Europe continue, we could be forced to alter our approach in selling, marketing, distributing and servicing our products.

We are subject to substantial government regulation, and any changes in regulation or violations of regulations by us could adversely affect our business, prospects, results of operations or financial condition.

Some of our products (primarily our Clinical Diagnostic products), production processes and marketing are subject to U.S. federal, state and local, and foreign regulation, including by the FDA in the United States and its foreign counterparts. The FDA regulates our Clinical Diagnostic products as medical devices, and we are subject to significant regulatory clearances or approvals to market our Clinical Diagnostic products and other requirements including, for example, recordkeeping and reporting requirements, such as the FDA's medical device reporting regulations and reporting of corrections and removals. The FDA has broad regulatory and enforcement powers. If the FDA determines that we have failed to comply with applicable regulatory requirements, it can impose a variety of enforcement actions ranging from public warning letters, fines, injunctions, consent decrees and civil penalties to suspension or delayed issuance of approvals, seizure or recall of our products, total or partial shutdown of production, withdrawal of approvals or clearances already granted, and criminal prosecution. For example, the FDA issued a warning letter in connection with its inspection of our manufacturing site in Munich in February 2015. The scope of the inspection was for our products manufactured at this site, which include collection devices and special chemistry tests. We have taken action to remediate the issues identified in the letter, and we submitted our official reply to the FDA in September 2015. The FDA has accepted the majority of our responses and a follow-up inspection required to close the warning letter is scheduled for April 2016. There has been no suspension of production or distribution activity as a result of this warning letter.

The FDA can also require us to repair, replace or refund the cost of devices that we manufactured or distributed. In addition, the FDA may change its clearance and approval policies, adopt additional regulations or revise existing regulations, or take other actions, which may prevent or delay approval or clearance of our products or impact our ability to modify our currently approved or cleared products on a timely basis. Changes in the FDA's review of certain clinical diagnostic products referred to as laboratory developed tests, which are tests developed by a single laboratory for use only in that laboratory, could affect some of our customers who use our Life Science instruments for laboratory developed tests. In the past, the FDA has chosen to not enforce applicable regulations and has not reviewed such tests for approval. However, the FDA has recently issued guidance that it will begin enforcing its medical device requirements, including premarket submission requirements, to such tests. Any delay in, or failure

to receive or maintain, clearance or approval for our products could prevent us from generating revenue from these products and adversely affect our business operations and financial results. Additionally, the FDA and other regulatory authorities have broad enforcement powers. Regulatory enforcement or inquiries, or other increased scrutiny on us, could affect the perceived safety and efficacy of our products and dissuade our customers from using our products.

Many foreign governments have similar rules and regulations regarding the importation, registration, labeling, sale and use of our products. Such agencies may also impose new requirements that may require us to modify or re-register products already on the market or otherwise impact our ability to market our products in those countries. For example, Europe is expected to publish broad changes to its regulations regarding in vitro diagnostic medical devices in 2016, including stricter product labeling requirements, Russia has recently enacted more stringent medical product registration and labeling regulations, China has enacted stricter labeling requirements, and we expect other countries, such as Brazil and India, to impose more regulations that impact our product registrations. Due to these evolving and diverse requirements, we face uncertain product approval timelines, additional time and effort to comply, reduced sales and potential fines for noncompliance. Increasing protectionism in such countries also impedes our ability to compete with local companies. For example, we may not be able to participate in certain public tenders in Russia because of increasing measures to restrict access to such tenders for companies without local manufacturing capabilities. Specifically, a resolution passed by Russia in February 2015 prohibits the procurement of certain types of medical devices by Russian state entities from foreign companies provided there are a sufficient number of Russian manufacturers submitting tenders. Such regulations could adversely affect our business, results of operations and financial condition.

We are also subject to government regulation of the use and handling of a number of materials and controlled substances. The U.S. Drug Enforcement Administration establishes registration, security, recordkeeping, reporting, storage, distribution and other requirements for controlled substances pursuant to the Controlled Substances Act of 1970. Failure to comply with present or future laws and regulations could result in substantial liability to us, suspension or cessation of our operations, restrictions on our ability to expand at our present locations or require us to make significant capital expenditures or incur other significant expenses.

We cannot assure you that we will be able to integrate acquired companies, products or technologies into our company successfully, or we may not be able to realize the anticipated benefits from the acquisitions.

As part of our overall business strategy, we pursue acquisitions of and investments in complementary companies, products and technologies. For information about our recent acquisitions, see "Overview" in Part II, Item 7 of this Annual Report. In order to be successful in these activities, we must, among other things:

- assimilate the operations and personnel of acquired companies;
- retain acquired business customers;
- minimize potential disruption to our ongoing business;
- retain key technical and management personnel;
- integrate acquired companies into our strategic and financial plans;
- accurately assess the value of target companies, products and technologies;
- comply with new regulatory requirements;
- harmonize standards, controls, procedures and policies;
- minimize the impact to our relationships with our employees and customers; and
- assess, document and remediate any deficiencies in disclosure controls and procedures and internal control over financial reporting.

The benefits of any acquisition may prove to be less than anticipated and may not outweigh the costs reported in our financial statements. Completing any potential future acquisitions could cause significant diversion of our management's time and resources. If we acquire new companies, products or technologies, we may be required to assume contingent liabilities or record impairment charges for goodwill and other intangible assets over time. We cannot assure you that we will successfully overcome these risks or any other problems we encounter in connection

with any acquisitions, and any such acquisitions could adversely affect our business, results of operations and financial condition.

Product quality and liability issues could harm our reputation and negatively impact our business, results of operations and financial condition.

We must adequately address quality issues associated with our products, including defects in our engineering, design and manufacturing processes, as well as defects in third-party components included in our products. Our instruments, reagents and consumables are complex, and identifying the root cause of quality issues, especially those affecting reagents or third-party components, is difficult. We may incur significant costs and expend substantial time in researching and remediating such issues. Quality issues could also delay our launching or manufacturing of new products. In addition, quality issues, unapproved uses of our products, or inadequate disclosure of risks related to our products, could result in product recalls or product liability or other claims being brought against us. These issues could harm our reputation, impair our relationship with existing customers and harm our ability to attract new customers, which could negatively impact our business, results of operations and financial condition.

Lack of key personnel could hurt our business.

Our products are very technical in nature. In general, only highly qualified and well-trained scientists have the necessary skills to develop, market and sell our products, and many of our manufacturing positions require very specialized knowledge and skills. In addition, the global nature of our business also requires that we have sophisticated and experienced staff to comply with increasingly complex international laws and regulations. We face intense competition for these professionals from our competitors, customers, marketing partners and other companies throughout our industry. In particular, the job market in Northern California, where many of our employees are located, has improved significantly. If we do not offer competitive compensation and benefits, we may fail to retain or attract a sufficient number of qualified personnel, which could impair our ability to properly run our business.

In some cases we rely on temporary personnel or consultants, and we may do so in the future. Such temporary personnel or consultants may lack the knowledge and/or specific skills necessary for our business, require time to train without benefiting us through extended employment and increase our costs. In addition, as noted above, our strategic initiatives, such our internal restructuring and ERP implementation, may be burdensome and disruptive and lead to employee dissatisfaction and attrition.

A reduction or interruption in the supply of components and raw materials could adversely affect our manufacturing operations and related product sales.

The manufacture of many of our products requires the timely delivery of sufficient amounts of quality components and materials. We manufacture our products in numerous manufacturing facilities around the world. We acquire our components and materials from many suppliers in various countries. We work closely with our suppliers to ensure the continuity of supply but we cannot guarantee these efforts will always be successful. Further, while we seek to diversify our sources of components and materials, in certain instances we acquire components and materials from a sole supplier. In addition, due to the regulatory environment in which we operate, we may be unable to quickly establish additional or replacement sources for some components or materials. If our supply is reduced or interrupted or of poor quality, and we are unable to develop alternative sources for such supply, our ability to manufacture our products in a timely or cost-effective manner could be adversely affected, which would adversely affect our ability to sell our products.

If our information technology systems are disrupted, or if we fail to successfully implement, manage and integrate our information technology and reporting systems, our business, results of operations and financial condition could be harmed.

Our information technology (IT) systems are an integral part of our business, and a serious disruption of our IT systems could have a material adverse effect on our business, results of operations and financial condition. We depend on our IT systems to process orders, manage inventory and collect accounts receivable. Our IT systems also allow us to efficiently purchase products from our suppliers and ship products to our customers on a timely basis, maintain cost-effective operations and provide customer service. We may experience disruption of our IT systems due to redundancy issues with our network servers. We cannot assure you that our contingency plans will allow us to operate at our current level of efficiency.

Our ability to implement our business plan in a rapidly evolving market requires effective planning, reporting and analytical processes. We expect that we will need to continue to improve and further integrate our IT systems, reporting systems and operating procedures by training and educating our employees with respect to these improvements and integrations on an ongoing basis in order to effectively run our business. We may suffer interruptions in service, loss of data or reduced functionality when we upgrade or change systems. If we fail to successfully manage and integrate our IT systems, reporting systems and operating procedures, it could adversely affect our business, results of operations and financial condition. See also our risk factors regarding our ERP implementation and data security above and events beyond our control below.

Natural disasters, terrorist attacks, acts of war or other events beyond our control may cause damage or disruption to us and our employees, facilities, information systems, security systems, vendors and customers, which could significantly impact our business, results of operations and financial condition.

We have significant manufacturing and distribution facilities, including in the western United States, France, Switzerland, Germany and Singapore. In particular, the western United States has experienced a number of earthquakes, wildfires, floods, landslides and other natural disasters in recent years. These occurrences could damage or destroy our facilities which may result in interruptions to our business and losses that exceed our insurance coverage. In addition, strikes or other labor unrest at any of our sites or surrounding areas could cause disruption to our business.

Acts of terrorism, bioterrorism, violence or war could also affect the markets in which we operate, our business operations and strategic plans. Political unrest may affect our sales in certain regions, such as in Southeast Asia, the Middle East and Eastern Europe. In particular, the political turmoil in Ukraine, along with the response of the Russian and U.S. governments to this situation, has the potential to impact our operations in Russia. Any of these events could adversely affect our business, results of operations and financial condition.

Environmental, health and safety regulations and enforcement proceedings may negatively impact our business, results of operations and financial condition.

Our operations are subject to federal, state, local and foreign environmental laws and regulations that govern such activities as transportation of goods, emissions to air and discharges to water, as well as handling and disposal practices for solid, hazardous and medical wastes. In addition to environmental laws that regulate our operations, we are also subject to environmental laws and regulations that create liability and clean-up responsibility for spills, disposals or other releases of hazardous substances into the environment as a result of our operations or otherwise impacting real property that we own or operate. The environmental laws and regulations also subject us to claims by third parties for damages resulting from any spills, disposals or releases resulting from our operations or at any of our properties. We must also comply with various health and safety regulations in the United States and abroad in connection with our operations.

We may in the future incur capital and operating costs to comply with currently existing laws and regulations, and possible new statutory enactments, and these expenditures may be significant. We have incurred, and may in the future incur, fines related to environmental matters and/or liability for costs or damages related to spills or other releases of hazardous substances into the environment at sites where we have operated, or at off-site locations where we have sent hazardous substances for disposal. We cannot assure you, however, that such matters or any future obligations to comply with environmental or health and safety laws and regulations will not adversely affect our business, results of operations or financial condition.

We may be subject to additional tax liabilities.

We are subject to income taxes in the United States and many foreign jurisdictions. We calculate our provision for income taxes in each jurisdiction in which we operate. Significant judgment is required in determining our worldwide provision for income taxes and in the ordinary course of business, there are many tax positions taken where the ultimate resolution is uncertain. We are subject to the examination of our tax positions in the United States and foreign jurisdictions. Taxing authorities have disagreed with our judgment in the past and may disagree with positions we take in the future resulting in assessments of additional taxes. Economic and political pressures to increase tax revenues in various jurisdictions may make resolving tax disputes more difficult. For example, in recent years, the tax authorities in Europe have disagreed with our tax positions related to hybrid debt, research and development credits, transfer pricing and indirect taxes, among others. We regularly assess the likelihood of the outcome resulting from these examinations to determine the adequacy of our provision for income taxes. Although we believe our tax estimates are reasonable, the final determination of tax audits and any related litigation could be materially different from our historical income tax provisions and accruals. The results of an audit or litigation could have a material effect on our consolidated financial statements in the period or periods for which that determination is made. Changes in factors outside of our control, such as changes in tax laws or rates, changes in the interpretation of tax laws or changes in the jurisdictional mix of our earnings could adversely affect our financial position and results of operations.

Our debt may restrict our future operations.

We have substantial debt and have the ability to incur additional debt. As of December 31, 2015, we had approximately $436.0 million of outstanding indebtedness. In addition, we have a revolving credit facility that provides for up to $200.0 million, $0.8 million of which has been utilized for domestic standby letters of credit. Our incurrence of substantial amounts of debt may have important consequences. For instance, it could:

- make it more difficult for us to satisfy our financial obligations, including those relating to our outstanding debt;
- require us to dedicate a substantial portion of our cash flow from operations to the payment of interest and principal due under our debt, which will reduce funds available for other business purposes;
- increase our vulnerability to general adverse economic and industry conditions;
- limit our flexibility in planning for, or reacting to, changes in our business and the industries in which we operate;
- place us at a competitive disadvantage compared with some of our competitors that have less debt; and
- limit our ability to obtain additional financing required to fund working capital and capital expenditures and for other general corporate purposes.

Our existing credit facility and the terms of our other debt instruments, including agreements we may enter in the future, contain or will contain covenants imposing significant restrictions on our business. These restrictions may affect our ability to operate our business and may limit our ability to take advantage of potential business opportunities as they arise. These covenants place restrictions on our ability to, among other things: incur additional debt; acquire other businesses or assets through merger or purchase; create liens; make investments; enter into transactions with affiliates; sell assets; in the case of some of our subsidiaries, guarantee debt; and declare or pay dividends, redeem stock or make other distributions to stockholders. Our existing credit facility also requires

that we comply with certain financial ratios, including a maximum consolidated leverage ratio test and a minimum consolidated interest coverage ratio test.

Our ability to comply with these covenants may be affected by events beyond our control, including prevailing economic, financial and industry conditions. The breach of any of these restrictions could result in a default. An event of default under our debt agreements would permit some of our lenders to declare all amounts borrowed from them to be due and payable, together with accrued and unpaid interest. In addition, acceleration of our other indebtedness may cause us to be unable to make interest payments on our outstanding notes and repay the principal amount of our outstanding notes or may cause the future subsidiary guarantors, if any, to be unable to make payments under the guarantees.

We are subject to healthcare fraud and abuse laws and regulations and could face substantial penalties if we are unable to fully comply with such laws.

We are subject to healthcare fraud and abuse regulation and enforcement by both the U.S. federal government and the U.S. states and foreign governments in which we conduct our business. These healthcare laws and regulations include, for example:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from soliciting, receiving, offering or providing remuneration, directly or indirectly, in return for or to induce either the referral of an individual for, or the purchase order or recommendation of, any item or services for which payment may be made under a federal healthcare program such as the Medicare and Medicaid programs;

- U.S. federal false claims laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent. In addition, the U.S. federal government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the false claims statutes;

- the U.S. Physician Payment Sunshine Act, which requires certain manufacturers of drugs, biologics, devices and medical supplies to record any transfers of value to U.S. physicians and U.S. teaching hospitals;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, which governs the conduct of certain electronic healthcare transactions and protects the security and privacy of protected health information; and

- state or foreign law equivalents of each of the U.S. federal laws above, such as anti-kickback and false claims laws, which may apply to items or services reimbursed by any third-party payor, including commercial insurers.

These laws will continue to impose administrative, cost and compliance burdens on us. The shifting compliance environment and the need to build and maintain robust systems to comply with multiple jurisdictions with different compliance and/or reporting requirements increases the possibility that a healthcare company may violate one or more of these requirements. In addition, any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from the Medicare and Medicaid programs, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business, results of operations and financial condition.

We may incur losses in future periods due to write-downs in the value of financial instruments.

We have positions in a variety of financial instruments including asset backed securities and other similar instruments. Financial markets are quite volatile and the markets for these securities can be illiquid. The value of these securities will continue to be impacted by external market factors including default rates, changes in the value of the underlying property, such as residential or commercial real estate, rating agency actions, the prices at which observable market transactions occur and the financial strength of various entities, such as financial guarantors who provide insurance for the securities. Should we need to convert these positions to cash, we may not be able to sell these instruments without significant losses due to current debtor financial conditions or other market considerations.

Regulations related to "conflict minerals" could adversely impact our business.

As part of the Dodd-Frank Wall Street Reform and Consumer Protection Act, the SEC adopted disclosure requirements regarding the use of certain minerals, known as conflict minerals, which are mined from the Democratic Republic of Congo (DRC) and adjoining countries, as well as procedures regarding a manufacturer's efforts to identify the sourcing of such minerals and metals produced from those minerals. The European Union is considering additional reporting obligations. We have incurred, and will continue to incur, additional costs in order to comply with the SEC's disclosure requirements. In addition, we might incur further costs due to possible changes to our products, processes, or sources of supply as a consequence of our due diligence activities. As our supply chain is complex, we may not be able to sufficiently verify the origins of the specified minerals used in our products through our due diligence procedures, which may harm our reputation. In addition, we may encounter challenges to satisfy those customers who require that all of the components of our products be certified as "DRC conflict free", which could place us at a competitive disadvantage if we do not do so. We filed our report for the calendar year 2014 with the SEC on June 1, 2015.

Risks related to our common stock

A significant majority of our voting stock is held by the Schwartz family, which could lead to conflicts of interest.

We have two classes of voting stock: Class A Common Stock and Class B Common Stock. With a few exceptions, holders of Class A and Class B Common Stock vote as a single class. When voting as a single class, each share of Class A Common Stock is entitled to one-tenth of a vote, while each share of Class B Common Stock has one vote. In the election or removal of directors, the classes vote separately and the holders of Class A Common Stock are entitled to elect 25% of the Board of Directors, with holders of Class B Common Stock electing the remaining directors.

As a result of the Schwartz family's ownership of our Class A and Class B Common Stock, they are able to elect a majority of our directors, effect fundamental changes in our direction and control matters affecting us, including the determination of business opportunities that may be suitable for our company. The Schwartz family may exercise its control over us according to interests that are different from other investors' or debtors' interests. In particular, this concentration of ownership and voting power may have the effect of delaying or preventing a change in control of our company.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We own our corporate headquarters located in Hercules, California. The principal manufacturing and research locations for each segment are as follows:

Segment	Location	Owned/Leased
Life Science	Richmond, California	Owned/Leased
	Hercules, California	Owned/Leased
	Pleasanton, California	Leased
	Singapore	Leased
	Shanghai, China	Leased
	Oxford, England	Leased
Clinical Diagnostics	Hercules, California	Owned/Leased
	Benicia, California	Leased
	Irvine, California	Leased
	Greater Seattle area, Washington	Leased
	Cambridge, Massachusetts	Leased
	Lille, France	Owned
	Greater Paris area, France	Leased
	Nazareth-Eke, Belgium	Leased
	Cressier, Switzerland	Owned/Leased
	Dreieich, Germany	Owned/Leased

Most manufacturing and research facilities also house administration, sales and distribution activities. In addition, we lease office and warehouse facilities in a variety of locations around the world. The facilities are used principally for sales, service, distribution and administration for both segments.

ITEM 3. LEGAL PROCEEDINGS

On January 23, 2015, the City of Riviera Beach General Employees' Retirement System filed a shareholder derivative lawsuit in the Superior Court of California, Contra Costa County, against three of our current directors and one former director. We are also named as a nominal defendant. In the complaint, the plaintiff alleges that our directors breached their fiduciary duty of loyalty by failing to ensure that we had sufficient internal controls and systems for compliance with the Foreign Corrupt Practices Act ("FCPA"); that we failed to provide adequate training on the FCPA; and that based on these actions, the directors have been unjustly enriched. Purportedly seeking relief on our behalf, the plaintiff seeks an award of restitution and unspecified damages, costs and expenses (including attorneys' fees). On April 23, 2015, we and the individual defendants filed a demurrer requesting dismissal of the complaint in this case. The demurrer was heard on August 6, 2015, and the Court granted the demurrer for failure to make a demand on our Board of Directors on August 17, 2015, but provided leave to amend. On September 4, 2015, the plaintiff filed an amended complaint and simultaneously served a litigation demand letter on our Board of Directors via its counsel in this action. The letter demands that we investigate and bring appropriate legal action against certain individuals, including the defendants in the City of Riviera Beach case and

six current and former employees. The plaintiff also moved for a temporary stay in the proceedings, purportedly to enable the Board to respond to the demand. The Board has formed a Demand Review Committee to respond to the demand. On February 24, 2016, the Demand Review Committee reported to the Board that it had concluded its investigation and unanimously determined that it is not in the best interests of the Company and its stockholders to pursue litigation against any individuals named in the City of Riviera Beach's litigation demand letter. On October 6, 2015, we and the individual defendants filed a second demurrer, seeking to dismiss the case for failure to make a timely pre-suit demand. The case has been stayed pending mediation. The caption is City of Riviera Beach General Employees' Retirement System v. Schwartz et al., Case No. C-15-00140.

On August 13, 2015 and August 18, 2015, respectively, each of International Brotherhood of Electrical Workers Local 38 Pension Fund and Wayne County Employees' Retirement System filed a stockholder derivative complaint in the Delaware Court of Chancery against four of our current directors and one former director. We are named as a nominal defendant in the complaints. The complaints allege that the defendants failed to cause us to develop internal controls sufficient to ensure our compliance with the FCPA. The plaintiffs assert claims for breach of fiduciary duty and unjust enrichment and request an award of the damages we sustained as a result of the alleged violations, among other relief. The two lawsuits were consolidated on August 27, 2015. The case has been stayed pending mediation. The caption of the consolidated case is In re Bio-Rad Laboratories, Inc. Stockholder Litigation, Consol. C.A. No. 11387-VCN (Del. Ch.).

On May 27, 2015, our former general counsel, Sanford S. Wadler, filed a lawsuit in the U.S. District Court, Northern District of California, against us and four of our current directors and one former director. The plaintiff's suit alleges whistleblower retaliation in violation of the Sarbanes-Oxley Act and the Dodd-Frank Act for raising FCPA-related concerns. Mr. Wadler also alleges wrongful termination in violation of public policy, non-payment of wages and waiting time penalties in violation of the California Labor Code. The plaintiff seeks back pay, compensatory damages for lost wages, earnings, retirement benefits and other employee benefits, compensation for mental pain and anguish and emotional distress, waiting time penalties, punitive damages, litigation costs (including attorneys' fees) and reinstatement of employment. We believe this lawsuit is without merit, and on July 28, 2015 we filed a motion to dismiss the plaintiff's complaint and specifically requested dismissal of the claims alleged against us under the Dodd-Frank Act and California Labor Code 1102.5 and the claims against the directors under the Sarbanes-Oxley Act and Dodd-Frank Act. On October 23, 2015, the District Court granted our motion with respect to the alleged violations of the Sarbanes-Oxley Act against all the director defendants except Norman Schwartz with prejudice. The Court denied our motion to dismiss the claims under the Dodd-Frank Act as against both us and the director defendants. Discovery has started. A mediation is scheduled for April 19, 2016 and trial is scheduled for January 9, 2017.

We are vigorously defending against the claims above. We cannot at this time reasonably estimate a range of exposure, if any, of the potential liability. In addition, we are party to various other claims, legal actions and complaints arising in the ordinary course of business. We do not believe, at this time, that any ultimate liability resulting from any of these other matters will have a material adverse effect on our results of operations, financial position or liquidity. However, we cannot give any assurance regarding the ultimate outcome of these other matters and their resolution could be material to our operating results for any particular period, depending on the level of income for the period.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Information Concerning Common Stock

Bio-Rad's Class A and Class B Common Stock are listed on the New York Stock Exchange with the symbols BIO and BIO.B, respectively. The following sets forth, for the periods indicated, the high and low intraday sales prices for our Class A and Class B Common Stock.

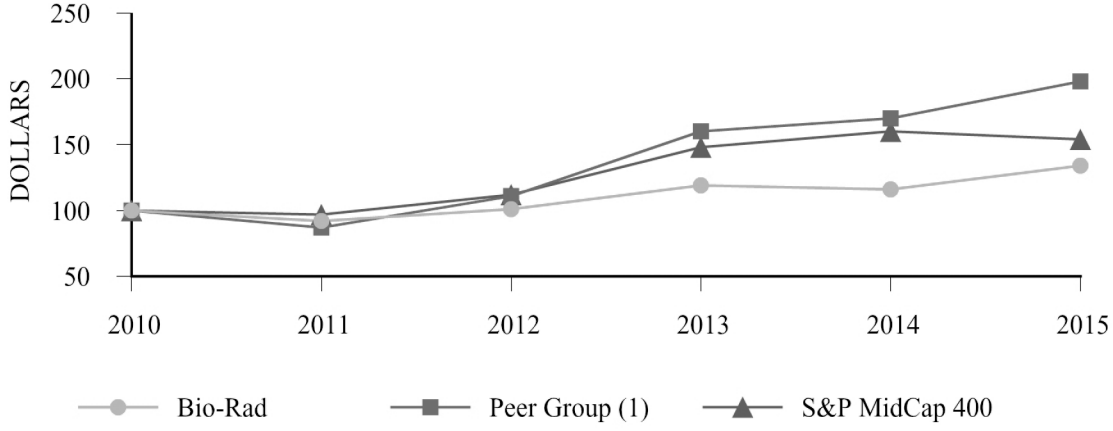
	Class A		Class B	
	High	Low	High	Low
2015				
Fourth Quarter	$ 142.48	$ 132.49	$ 141.77	$ 134.08
Third Quarter	152.38	131.25	152.57	131.83
Second Quarter	151.97	133.38	151.93	123.31
First Quarter	137.23	112.51	137.23	113.32
2014				
Fourth Quarter	$ 122.93	$ 102.71	$ 120.50	$ 108.80
Third Quarter	122.73	113.37	122.40	115.60
Second Quarter	131.42	117.98	128.70	118.40
First Quarter	134.13	120.43	135.60	121.10

On February 16, 2016, we had 298 holders of record of Class A Common Stock and 128 holders of record of Class B Common Stock. Bio-Rad has never paid a cash dividend and has no present plans to pay cash dividends.

See Item 12 of Part III of this report for the security ownership of certain beneficial owners and management and for securities authorized for issuance under equity compensation plans.

Stock Performance Graph

The following graph compares the cumulative stockholder returns over the past five years for our Class A Common Stock, the S&P 400 MidCap Index and a selected peer group, assuming $100 invested on December 31, 2010, and reinvestment of dividends if paid:



(1) The Peer Group consists of the following public companies: Danaher, Becton Dickinson, Thermo Fisher Scientific, Meridian Bioscience and PerkinElmer. Companies in our peer group reflect our participation in two different markets: life science research products and clinical diagnostics. No single public or private company has a comparable mix of products which serve the same markets. In many cases, only one division of a peer-group company competes in the same market as we do. Collectively, however, our peer group reflects products and markets similar to those of Bio-Rad.

This stock performance graph shall not be deemed incorporated by reference by any general statement incorporating by reference into any filing under the Securities Act or the Exchange Act, and shall not otherwise be deemed filed under these Acts.

ITEM 6. SELECTED FINANCIAL DATA

BIO-RAD LABORATORIES, INC.
Selected Financial Data
(in thousands, except per share data)

	Year Ended December 31,				
	2015	2014	2013	2012	2011
Net sales	$ 2,019,441	$ 2,175,044	$ 2,132,694	$ 2,069,235	$ 2,073,529
Cost of goods sold	897,771	996,527	954,216	914,077	894,700
Gross profit	1,121,670	1,178,517	1,178,478	1,155,158	1,178,829
Selling, general and administrative expense	761,990	808,200	798,070	681,778	695,984
Research and development expense	192,972	220,333	210,952	209,204	177,604
Interest expense	21,692	22,131	61,271	51,112	53,135
Foreign exchange losses, net	10,249	9,305	8,566	5,040	13,842
Other (income) expense, net	(11,080)	(13,009)	(12,766)	(21,883)	(7,583)
Income before income taxes	145,847	131,557	112,385	229,907	245,847
Provision for income taxes	(32,754)	(42,712)	(34,574)	(64,361)	(67,034)
Net income attributable to noncontrolling interests	—	—	(21)	(69)	200
Net income attributable to Bio-Rad	$ 113,093	$ 88,845	$ 77,790	$ 165,477	$ 179,013
Basic earnings per share	$ 3.87	$ 3.08	$ 2.72	$ 5.85	$ 6.39
Diluted earnings per share	$ 3.85	$ 3.05	$ 2.69	$ 5.78	$ 6.29
Cash dividends paid per common share	$ —	$ —	$ —	$ —	$ —
Total assets	$ 3,711,542	$ 3,341,278	$ 3,388,790	$ 3,443,503	$ 3,099,743
Long-term debt, net of current maturities	$ 435,707	$ 435,710	$ 435,615	$ 732,414	$ 731,698

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This discussion should be read in conjunction with the information contained in our consolidated financial statements and the accompanying notes which are an integral part of the statements.

Overview. We are a multinational manufacturer and worldwide distributor of our own life science research and clinical diagnostics products. Our business is organized into two primary segments, Life Science and Clinical Diagnostics, with the mission to provide scientists with specialized products needed for biological research and clinical diagnostics.

We sell more than 8,000 products and services to a diverse client base comprised of scientific research, healthcare, education and government customers worldwide. We do not disclose quantitative information about our different products and services as it is impractical to do so based primarily on the numerous products and services that we sell and the global markets that we serve.

We manufacture and supply our customers with a range of reagents, apparatus and equipment to separate complex chemical and biological materials and to identify, analyze and purify components. Because our customers require standardization for their experiments and test results, much of our revenues are recurring.

We are impacted by the support of many governments for both research and healthcare. The current global economic outlook is still uncertain as the need to control government social spending by many governments limits opportunities for growth. Approximately 36% of our 2015 consolidated net sales are derived from the United States and approximately 64% are derived from international locations, with Europe being our largest region overall. The international sales are largely denominated in local currencies such as the Euro, Swiss Franc, Japanese Yen, Chinese Yuan and British Sterling. As a result, our consolidated net sales expressed in dollars benefit when the U.S. dollar weakens and suffer when the dollar strengthens. When the U.S. dollar strengthens, we benefit from lower cost of sales from our own international manufacturing sites as well as non-U.S. suppliers and from lower international operating expenses.

In January 2016, we acquired a high performance analytical flow cytometer platform from Propel Labs (Propel) that will enable advanced and novice users to perform basic and multi-parameter cytometry for a wide range of applications and chemistries. The aggregate consideration for the instrument consisted of a cash payment in January 2016 of $10.0 million, with payments of up to $20.0 million due upon the completion of certain technical milestones. Following the completion of these milestones, semi-annual performance payments to Propel will be required based on a percentage of sales through 2020. Bio-Rad expects to launch the instrument later this year.

As previously disclosed, in May 2010 we voluntarily disclosed to the U.S. Department of Justice (DOJ) and the Securities and Exchange Commission (SEC) certain likely or potential violations of the U.S. Foreign Corrupt Practices Act (FCPA). Effective November 3, 2014, we entered into a non-prosecution agreement (NPA) with the DOJ and consented to the entry of an Order by the SEC (SEC Order), which actions resolve both the DOJ and SEC investigations. As a result of the settlements with the DOJ and the SEC, during the fourth quarter of 2014 we paid a total of $55.1 million that included a penalty of $14.4 million, $35.1 million in disgorgement, and $5.6 million in interest.

In April 2014, we acquired 100% of the issued and outstanding stock of GnuBIO, Inc. (GnuBIO). This acquisition was accounted for as a business combination and is included in our Clinical Diagnostics segment's results of operations from the acquisition date. The final fair values of the net assets acquired from GnuBIO as of the acquisition date were determined to be $46.4 million of indefinite-lived intangible assets (specifically in-process research and development or "IPR&D"), $13.5 million of goodwill and $9.5 million of net tangible liabilities.

The fair value of the consideration as of the acquisition date was $50.4 million, which included $39.7 million paid in cash at the closing date and $10.7 million in contingent consideration potentially payable to GnuBIO's shareholders. The contingent consideration was based on a probability-weighted income approach that could reach $70.0 million upon the achievement of all development/regulatory and sales milestones. The contingent consideration for the development/regulatory milestones was valued at $10.7 million, based on assumptions regarding the probability of achieving the milestones, with such amounts discounted to present value. The contingent consideration related to the development/regulatory milestones was revalued to a fair value of $10.0 million as of December 31, 2015 and 2014 and is included in Other current liabilities. The contingent consideration for the sales milestones at the acquisition date and at December 31, 2015 was determined to be negligible, using the risk-neutral probability of being in the money based on a Black-Scholes framework. The sales that are required under the purchase agreement have a low probability of obtaining the thresholds.

During the third quarter of 2012, we recognized a contingent consideration liability of $44.6 million upon our acquisition of a new cell sorting system from Propel Labs, Inc. The fair value of the contingent consideration was based on a probability-weighted income approach related to the achievement of certain development and sales milestones. The development milestone was achieved and paid in 2013. The first sales milestone was reached, resulting in payments of $2.4 million and $3.0 million in the fourth quarter of 2014 and the first quarter of 2015, respectively. During 2015, the contingent consideration was revalued by a decrease of $5.6 million to its estimated fair value of $9.1 million as of December 31, 2015.

Critical Accounting Policies and Estimates

The accompanying discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles (GAAP). The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and contingencies as of the date of the financial statements and reported amounts of revenues and expenses during the reporting periods. We evaluate our estimates on an on-going basis. We base our estimates on historical experience and on other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. However, future events may cause us to change our assumptions and estimates, which may require adjustment. Actual results could differ from these estimates. We have determined that for the periods reported in this Annual Report on Form 10-K the following accounting policies and estimates are critical in understanding our financial condition and results of operations.

Accounting for Income Taxes. Management is required to make estimates related to our income tax provision in each of the jurisdictions in which we operate. This process involves estimating our current tax exposures, as well as making judgments regarding the recoverability of deferred tax assets in each jurisdiction. Deferred tax assets and liabilities reflect the tax effects of losses, credits, and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Management assesses the likelihood that the deferred tax assets will be recovered from future taxable income and to the extent management believes that recovery is not likely, a valuation allowance must be established. To the extent management establishes a valuation allowance or increases this allowance in a period, an increase to expense within the Provision for income taxes in the Consolidated Statements of Income may result.

We have recorded a valuation allowance of $58.3 million and $58.6 million as of December 31, 2015 and 2014, respectively, due to uncertainties related to our ability to utilize some of the deferred tax assets, primarily consisting of certain foreign net operating losses carried forward. The valuation allowance is based on management's current estimates of taxable income for the jurisdictions in which we operate and the period over which the deferred tax assets will be recoverable. In the event that actual results differ from these estimates, or these estimates are adjusted in future periods, an additional valuation allowance may need to be established, which would increase the tax provision, lowering income and impacting our financial position. Should realization of these deferred tax assets

for which a valuation allowance has been provided occur, the provision for income taxes may decrease, raising income and positively impacting Bio-Rad's financial position.

We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefits recognized in the financial statements on a particular tax position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon settlement. The amount of unrecognized tax benefits is adjusted as appropriate for changes in facts and circumstances, such as significant amendments to existing tax law, new regulations or interpretations by the taxing authorities, new information obtained during a tax examination, or resolution of an examination. We recognize both accrued interest and penalties, where appropriate, related to unrecognized tax benefits in income tax expense. Our overall effective tax rate is subject to fluctuations because of changes in the geographic mix of earnings, changes to statutory tax rates and tax laws, and because of the impact of various tax audits and assessments, as well as generation of tax credits.

Valuation of Goodwill and Long-lived Assets. Goodwill represents the excess of the cost over the fair value of net tangible and identifiable intangible assets of acquired businesses. Goodwill amounts are assigned to reporting units at the time of acquisition and are adjusted for any subsequent significant transfers of business between reporting units. We assess the impairment of goodwill annually in the fourth quarter or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. We perform the impairment tests of goodwill at our reporting unit level, which is one level below our operating segments. The goodwill impairment test consists of a two-step process. The first step of the goodwill impairment test, used to identify potential impairment, compares the fair value of a reporting unit to its carrying value, including goodwill. If the fair value of the reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired, and the second step of the impairment test is not required. The second step, if required, compares the implied fair value of the reporting unit goodwill with the carrying amount of that goodwill. The fair value of a reporting unit is allocated to all of the assets and liabilities of that unit (including any unrecognized intangible assets) as if the reporting unit had been acquired in a business combination and the fair value of the reporting unit was the price paid to acquire the reporting unit. If the carrying amount of the reporting unit's goodwill exceeds its implied fair value, an impairment charge is recognized in an amount equal to that excess.

We use a projected discounted cash flow model to determine the fair value of a reporting unit. This discounted cash flow method for determining goodwill may be different from the fair value that would result from an actual transaction between a willing buyer and a willing seller. Projections such as discounted cash flow models are inherently uncertain and accordingly, actual future cash flows may differ materially from projected cash flows. Management judgment is required in developing the assumptions for the discounted cash flow model. These assumptions include revenue growth rates, profit margins, future capital expenditures, working capital needs, expected foreign currency rates, discount rates and terminal values. We estimate future cash flows using current and longer-term high level financial forecasts. These forecasts take into account the current economic environment. The discount rates used are compiled using independent sources, current trends in similar businesses and other observable market data. Changes to these rates might result in material changes in the valuation and determination of the recoverability of goodwill. For example, an increase in the discount rate used to discount cash flows will decrease the computed fair value.

Impairment tests are highly sensitive to changes in assumptions and minor changes to assumptions that could result in impairment losses. Our forecasts utilized in our 2015 impairment test assumed, among other things, sales growth from executing our sales and marketing programs, new product introductions, successful product development and timely registration of our products when required, while controlling costs. In addition, external factors, such as currency, inflation rates and cost of capital, could affect the determination of fair value of our reporting units. Our impairment tests resulted in excessive fair value over book value ranging from 18% to more than 200% for our various reporting units. If the initiatives mentioned above do not achieve the desired results, or external factors change detrimentally, future impairment losses may occur.

To validate the reasonableness of the reporting unit fair values, we reconcile the aggregate fair values of the reporting units to the enterprise market capitalization. In performing the reconciliation we may, depending on the volatility of the market value of our stock price, use either the stock price on the valuation date or the average stock price over a range of dates around the valuation date.

For purposes of recognition and measurement of an impairment loss, a long-lived asset or assets are grouped with other assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. We assess the impairment of long-lived assets (including identifiable intangibles) whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors that we consider important that could trigger an impairment review include:

- significant reporting unit under-performance relative to expected, historical or projected future operating results;
- significant changes in the manner of use of the long-lived assets, intangible assets or the strategy for our overall business;
- a current expectation that, more likely than not, a long-lived asset will be sold or otherwise disposed of before the end of its previously estimated useful life; and
- significant negative industry, legal, regulatory or economic trends.

When management determines that the carrying value of long-lived assets may not be recoverable based upon the existence of one or more of the above indicators of impairment, we test for any impairment based on a projected undiscounted cash flow method. Projected future operating results and cash flows of the asset or asset group are used to establish the fair value used in evaluating the carrying value of long-lived and intangible assets. We estimate the future cash flows of the long-lived assets using current and long-term financial forecasts. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. If this is the case, an impairment loss would be recognized. The impairment loss recognized is the amount by which the carrying amount exceeds the fair value. There were no impairment losses recorded in 2015 and 2013. In 2014, we impaired licenses of a discontinued product line in the amount of $6.4 million. This impairment charge included $5.8 million in Cost of goods sold and $0.6 million in Research and development expense in the accompanying Consolidated Statements of Income.

Valuation of Inventories. We value inventory at the lower of the actual cost to purchase and/or manufacture the inventory, or the current estimated net realizable value of the inventory. We review inventory quantities on hand and reduce the cost basis of excess and obsolete inventory based primarily on an estimated forecast of product demand, production requirements and the quality, efficacy and potency of raw materials. This review is done on a quarterly basis or, if warranted by the circumstances, more frequently. In addition, our industry is characterized by technological change, frequent new product development and product obsolescence that could result in an increase in the amount of obsolete inventory quantities on hand. Our estimates of future product demand may prove to be inaccurate, and if too high, we may have overstated the carrying value of our inventory. In the future, if inventory is determined to be overvalued, we would be required to write down the value of inventory to market and recognize such costs in our cost of goods sold at the time of such determination. Therefore, although we make efforts to ensure the accuracy of our forecasts of future product demand and perform procedures to safeguard overall inventory quality, any significant unanticipated changes in demand, technological developments, regulations, storage conditions, or other economic or environmental factors affecting biological materials, could have a significant impact on the value of our inventory and reported results of operations.

Valuation of Investments. We regularly review our investments for factors that may indicate that a decline in the fair value of an investment below its carrying value is other-than-temporary. Some factors considered in evaluating whether or not a decline in fair value is other-than-temporary include our ability and intent to retain the investment for a period of time sufficient to allow for a recovery in value, the duration and extent to which the fair value has been less than cost and the financial condition and prospects of the issuer. Such reviews are inherently uncertain in that the value of the investment may not fully recover or may decline further in future periods resulting in realized losses.

Warranty Reserves. We warrant certain equipment against defects in design, materials and workmanship, generally for a period of one year. Upon delivery and on acceptance of that equipment, we establish, as part of cost of goods sold, a provision for the expected costs of such warranty repairs based on historical experience, specific warranty terms and customer feedback. A review is performed on a quarterly basis to assess the adequacy of our warranty reserve and it is adjusted if necessary. The warranty reserve is based on actual experience and expected future costs to be incurred. Should realized costs be higher than expected costs, cost of goods sold would be lower in the period of estimation and higher when realized.

Allowance for Doubtful Accounts. We maintain an allowance for doubtful accounts for estimated losses resulting from the collectability of our customer accounts. The amount of the allowance is determined by analyzing known uncollectible accounts, the age of our receivables, economic conditions in the customers' country or industry, historical losses and our customers' general credit-worthiness. Amounts later determined and specifically identified to be uncollectible are charged or written off against this allowance. Uncertainty in the current economic environment, if prolonged, could result in greater amounts becoming uncollectible in the future. Should the estimates of losses be higher than the actual uncollectible accounts, we would report lower profitability when the estimates are made and higher profitability when the receivable is collected.

Litigation Accruals. We record as liabilities in our Consolidated Balance Sheets estimated amounts for claims that are probable and can be reasonably estimated. The likelihood of a material change in these estimated liabilities is dependent on the possible outcome of settlement negotiations, regulatory or judicial review and the development of facts and circumstances in extended litigation which could change claims or assessments when both the amount and range of loss on some outstanding litigation is uncertain. We disclose in the footnotes of the financial statements when we are unable to make a reasonable estimate of a material liability that could result from unfavorable outcomes in litigation. As events occur, we will assess the potential liability related to our pending litigation and revise our estimates. Such revisions could materially impact our results of operations.

Results of Operations - Sales, Gross Margins and Expenses

The following shows cost of goods sold, gross profit, expense items and net income as a percentage of net sales:

	Year Ended December 31,		
	2015	2014	2013
Net sales	100.0%	100.0%	100.0%
Cost of goods sold	44.5	45.8	44.7
Gross profit	55.5	54.2	55.3
Selling, general and administrative expense	37.7	37.2	37.4
Research and development expense	9.6	10.1	9.9
Net income attributable to Bio-Rad	5.6	4.1	3.6

Net sales

Net sales (sales) in 2015 were $2.02 billion, a decrease of 7.2% compared to $2.18 billion in 2014. Excluding the impact of foreign currency, 2015 sales increased by approximately 1.6% compared to 2014. Currency neutral sales growth was primarily reflected in the United States and China.

The Life Science segment sales in 2015 were $695.0 million, a decrease of 4.6% compared to 2014. On a currency neutral basis, sales increased 2.5% compared to 2014. The currency neutral sales increase was primarily in our Droplet Digital™ PCR, western blotting, process chromatography media and cell biology products. The currency neutral sales increase was primarily in the United States and Europe, partially offset by lower sales in Asia, excluding China.

The Clinical Diagnostics segment sales in 2015 were $1.31 billion, a decrease of 8.5% compared to 2014. On a currency neutral basis, sales increased 1.1% compared to 2014. The Clinical Diagnostics segment had currency neutral sales growth from quality controls and immunology products, partially offset by declines in blood typing and infectious disease products. Currency neutral sales growth was primarily in North America, China and Latin America, while European markets were still experiencing consolidation and pricing pressures.

Net sales (sales) in 2014 were $2.18 billion, an increase of 2.0% compared to $2.13 billion in 2013. Excluding the impact of foreign currency, 2014 sales increased by approximately 3.3% compared to 2013. Currency neutral sales growth was reflected in most regions, primarily in the United States, the emerging markets of Eastern Europe and China, while currency neutral sales in Japan decreased.

The Life Science segment sales in 2014 were $728.3 million, an increase of 2.6% compared to 2013. On a currency neutral basis, sales increased 4.0% compared to 2013. The currency neutral sales increase was reflected across most product lines, except for protein separations products. Currency neutral sales growth was primarily in North America, Europe, and China, partially offset by decreased sales in the rest of Asia.

The Clinical Diagnostics segment sales in 2014 were $1.43 billion, an increase of 1.7% compared to 2013. On a currency neutral basis, sales increased 2.9% compared to 2013. Clinical Diagnostics had growth across most product lines on a currency neutral basis, most notably from quality control products and blood typing. Sales growth was partially offset by lower sales for infectious disease in the serology product line primarily due to laboratory consolidation and pricing pressure in Europe and North America. Currency neutral sales growth was primarily in Eastern Europe and China, partially offset by decreased sales in Western Europe.

Gross margin

Consolidated gross margins were 55.5% in 2015 compared to 54.2% in 2014. Life Science segment gross margins in 2015 increased from 2014 by approximately 0.9 percentage points, primarily due to sales of higher gross margin products including Droplet Digital™ PCR, gene expression and cell biology products. In addition, lower service costs in Europe and costs associated with the closing of a manufacturing plant in 2014 contributed to higher margins. Clinical Diagnostics segment gross margins in 2015 increased from 2014 by approximately 1.8 percentage points. The increase compared to 2014 was primarily due to the 2014 consolidation and closure of certain facilities and the discontinuation of an underperforming product line. Sales mix also contributed to the higher gross margins in 2015.

Beginning in 2013, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (PPACA), among other initiatives, provided for a 2.3% annual excise tax on the sales of certain medical devices in the U.S. Bio-Rad has been paying this excise tax on most of our U.S. Clinical Diagnostic sales, which we accounted for as a period cost in Cost of goods sold. However, the Consolidated Appropriations Act, 2016 (Pub. L. 114-113), signed into law on December 18, 2015, includes a two year moratorium on the medical device excise tax during the period beginning on January 1, 2016, and ending on December 31, 2017.

Consolidated gross margins were 54.2% in 2014 compared to 55.3% in 2013. Life Science segment gross margins in 2014 decreased from 2013 by approximately 0.1 percentage points, essentially flat compared to 2013. Lower margins were reflected in protein separation products and approximately $1.7 million of costs associated with the closing of a small manufacturing plant, which were almost entirely offset by higher margins in process chromatography, Droplet Digital™ PCR and food testing products. Clinical Diagnostics segment gross margins in 2014 decreased from 2013 by approximately 1.5 percentage points. The decrease primarily reflected approximately $8.3 million associated with the discontinuance of a product line in 2014 that was coupled with an increase in inventory reserves and the write-down of licenses for specific technology. The decrease was also due to continued pricing pressure, approximately $1.6 million associated with closing and consolidating certain facilities in 2014, and increased scrap for obsolete products.

Selling, general and administrative expense

Consolidated selling, general and administrative expenses (SG&A) decreased to $762.0 million or 37.7% of sales in 2015 compared to $808.2 million or 37.2% of sales in 2014. Underlying the overall decrease in SG&A was the impact of foreign currency, an accrual of $19.5 million in 2014 associated with the SEC and DOJ investigations relating to the FCPA investigation for which a final settlement was reached in the fourth quarter of 2014, and a reduction of $4.2 million from the revaluations of contingent consideration. Currency neutral increases in SG&A were primarily employee-related expenses, our largest cost, facilities and professional fees, partially offset by travel. Other increases in SG&A included $2.3 million of bad debt expense and a one-time distributor termination cost of $1.9 million.

Consolidated SG&A represented 37.2% of sales in 2014 compared to 37.4% of sales in 2013. Decreases in SG&A expense relative to sales were primarily driven by:

- a lower expense accrual of $19.5 million in 2014 compared to an accrual of $30.0 million in 2013 in connection with reaching our final settlement with the SEC and DOJ investigations relating to the FCPA,
- lower external marketing and advertising expense, and professional fees, and
- a decrease in bad debt expense of $4.0 million, primarily in Russia, due to a distributor bad debt in 2013, and in Spain due to payments received of approximately $11 million from public agencies, in addition to improved collections in the U.S. after implementing the first phase of a new ERP system.

Partially offsetting these decreased costs were:

- an increase of employee-related expenses, our largest cost, primarily due to an increase for employee compensation that comprised of incentive plans, including related fringe benefits, and commissions and temporary help associated with our ERP implementation,
- $1.4 million in 2014 for the net decrease in estimated fair value of contingent considerations for the cell sorting system and GnuBIO, compared to $5.8 million in 2013 for the net decrease in estimated fair value of contingent consideration for the cell sorting system and a write-off of the remaining QuantaLife contingent consideration liability, resulting in an overall increase in contingent consideration of $4.4 million,
- an increase in third party commissions and facilities, and
- an increase in software costs primarily associated with the ERP implementation.

Research and development expense

Research and development expense decreased to $193.0 million or 9.6% of sales in 2015 compared to $220.3 million or 10.1% of sales in 2014. Life Science segment research and development expense decreased in 2015 from 2014 primarily due to headcount reductions, lower supplies and lower external product development spend. Clinical Diagnostics segment research and development expense decreased in 2015 from 2014 primarily due to the wind down of spending on projects as they approach launch and the discontinuation of an underperforming product line in 2014.

Research and development expense increased to $220.3 million or 10.1% of sales in 2014 compared to $211.0 million or 9.9% of sales in 2013. Life Science segment research and development expense decreased slightly in 2014 from 2013 primarily due to projects nearing completion. Clinical Diagnostics segment research and development expense increased in 2014 from 2013 primarily due to continued investments in diagnostic applications using the recently acquired droplet digital PCR technology, and new instrument platforms and assays. The increase also reflected approximately $3.1 million associated with the discontinuance of a product line in 2014 that included contractual costs, and the write-down of equipment and licenses.

Results of Operations – Non-operating

Interest expense

Interest expense in 2015 decreased 2.0% to $21.7 million compared to 2014 primarily due to $0.6 million in 2014 associated with our offer to settle the SEC and DOJ investigations relating to the FCPA investigation for which a final settlement was reached in the fourth quarter of 2014.

Interest expense in 2014 decreased 63.9% to $22.1 million compared to 2013 primarily due to the absence of interest expense of $18.7 million and $15.6 million associated with a call premium, and expensing the remaining original bond discount and unamortized debt issuance costs associated with the $300.0 million principal amount of Senior Subordinated Notes (8.0% Notes), which were redeemed on September 30, 2013. In addition, interest expense in connection with reaching our final settlement with the SEC and DOJ investigations relating to the FCPA was $0.6 million for 2014 compared to $5.0 million for 2013.

Foreign currency exchange gains and losses

Foreign currency exchange gains and losses consist of foreign currency transaction gains and losses on intercompany net receivables and payables and the change in fair value of our forward foreign exchange contracts used to manage our foreign currency exchange risk. Net foreign currency exchange losses for 2015, 2014 and 2013 were $10.2 million, $9.3 million and $8.6 million, respectively. The 2015, 2014 and 2013 net foreign currency exchange losses were attributable to market volatility, increasing costs to hedge and the result of the estimating process inherent in the timing of shipments and payments of intercompany debt. All years are affected by the economic hedging program we employ to hedge our intercompany receivables and payables.

Other income and expense, net

Other income and expense, net includes investment and dividend income, generally interest income on our cash and cash equivalents, short-term investments and long term marketable securities. Other (income) expense, net in 2015 decreased to $11.1 million income compared to $13.0 million income in 2014. The decrease was primarily due to lower interest and investment income primarily related to a weaker 2015 foreign currency exchange rate for ordinary and preferred dividends from our investment in Sartorius AG, and realized losses in 2015 compared to no realized losses in 2014.

Other (income) expense, net in 2014 increased to $13.0 million income compared to $12.8 million income in 2013. The increase was primarily due to higher dividends than in 2013, and realized gains in 2014 compared to realized losses in 2013, partially offset by lower interest on investment income than in 2013. Sales of investments in 2013 were used to provide cash to redeem all of the $300.0 million 8.0% Senior Subordinated Notes.

Effective tax rate

Our effective tax rate was 22%, 32% and 31% in 2015, 2014 and 2013, respectively. The effective tax rate for 2015 included a significant tax benefit from expected utilization of foreign tax credits in the U.S. The effective tax rate for 2014 included nondeductible penalties and losses that were nonrecurring. The effective tax rate for 2013 included a significant tax benefit related to the reinstated 2012 U.S. federal research credit, partially offset by an increase in tax liabilities for unrecognized tax benefits and audit settlements in our foreign jurisdictions.

Our foreign taxes result primarily from income earned in France and Switzerland. Many jurisdictions in which we operate, including Switzerland, Russia, the U.K. and Singapore, have statutory tax rates that are significantly lower than the U.S. statutory tax rate of 35%. Our effective tax rate may be impacted in the future, either favorably or unfavorably, by many factors including, but not limited to, changes to statutory tax rates, changes in tax laws or regulations, tax audits and settlements, and generation of tax credits.

Our income tax returns are audited by U.S. federal, state and foreign tax authorities. We are currently under examination by many of these tax authorities. The tax years open to examination include the years 2012 and forward for the U.S., and the years 2008 and forward for certain foreign jurisdictions, including France, Switzerland and Germany. There are differing interpretations of tax laws and regulations, and as a result, significant disputes may arise with these tax authorities involving issues of the timing and amount of deductions and allocations of income among various tax jurisdictions. We evaluate our exposures associated with our tax filing positions on a quarterly basis.

We record liabilities for unrecognized tax benefits related to uncertain tax positions. We do not believe any currently pending uncertain tax positions will have a material adverse effect on our consolidated financial statements, although an adverse resolution of one or more of these uncertain tax positions in any period may have a material impact on the results of operations for that period.

As of December 31, 2015, based on the expected outcome of certain examinations or as a result of the expiration of statutes of limitation for certain jurisdictions, we believe that within the next twelve months it is reasonably possible that our previously unrecognized tax benefits could decrease by approximately $4.0 million. Substantially all such amounts will impact our effective income tax rate.

Liquidity and Capital Resources

Bio-Rad operates and conducts business globally, primarily through subsidiary companies established in the markets in which we trade. Goods are manufactured in a small number of locations, and are then shipped to local distribution facilities around the world. Our product mix is diversified, and certain products compete largely on product efficacy, while others compete on price. Gross margins are generally sufficient to exceed normal operating costs, and funding for research and development of new products, as well as routine outflows of capital expenditures, interest and taxes. In addition to the annual positive cash flow from operating activities, additional liquidity is readily available via the sale of short-term investments and access to our $200.0 million unsecured Credit Agreement that we entered into in June 2014. Borrowings under the Credit Agreement are on a revolving basis and can be used to make permitted acquisitions, for working capital and for other general corporate purposes. We had no outstanding borrowings under the Credit Agreement as of December 31, 2015, however, $0.8 million was utilized for domestic standby letters of credit that reduced our borrowing availability. The Credit Agreement matures in June 2019.

At December 31, 2015, we had available $786.3 million in cash, cash equivalents and short-term investments, of which approximately 32% was held in our foreign subsidiaries. We believe that our holdings of cash, cash equivalents and short-term investments in the U.S. and in our foreign subsidiaries are sufficient to meet both the current and long-term needs of our global operations. The amount of funds held in the United States can fluctuate due to the timing of receipts and payments in the ordinary course of business and due to other reasons, such as business-development activities. As part of our ongoing liquidity assessments, we regularly monitor the mix of domestic and foreign cash flows (both inflows and outflows). Repatriation of overseas funds will result in additional U.S. federal and state income tax payments. In general, it is our practice and intention to indefinitely reinvest the cash generated by our foreign subsidiaries in our foreign subsidiaries' operations. However, during the fourth quarter of 2015, a foreign Bio-Rad entity repatriated approximately $107 million to the U.S.

Under domestic and international lines of credit, standby letters of credit and guarantee arrangements, we had $201.2 million available for borrowing and usage as of December 31, 2015, which was reduced by $2.6 million that was utilized for standby letters of credit and guarantee arrangements issued by our banks to support our obligations. Management believes that this availability, together with cash flow from operations, will be adequate to meet our current objectives for operations, research and development, capital additions for manufacturing and distribution, plant and equipment, information technology systems and an acquisition of reasonable proportion to our existing total available capital.

While economic growth is somewhat improving, instability still exists in developed nations and in the U.S., such as the slowing rate of growth in the Chinese economy and in emerging markets, especially those oil-producing countries that have been affected by the recent decline in oil prices, which may adversely affect our future results of cash flows. Demand for our products and services could change more dramatically than in previous years based on activity, funding, reimbursement constraints and support levels from government, universities, hospitals and private industry, including diagnostic laboratories. The need for certain sovereign nations with large annual deficits to curtail spending could lead to slower growth of, or even a decline in, our business. Sovereign nations either delaying payment for goods and services or renegotiating their debts could impact our liquidity. The situation in these sovereign nations is continuously evolving and we have no greater knowledge of the situation other than what is publicly reported. As of December 31, 2015 and December 31, 2014, we had accounts receivable, net of allowance for doubtful accounts, in Spain, Italy, Greece and Portugal of $40.7 million and $45.4 million, respectively. Most of the decrease from December 31, 2014 was the result of a weakening foreign currency.

Cash Flows from Operations

Net cash provided by operations was $186.2 million, $273.3 million and $169.1 million in 2015, 2014, and 2013, respectively. The net decrease between 2015 and 2014 of $87.1 million primarily resulted from:

- lower cash received from customers primarily due to the value of foreign currency denominated sales and subsequent collections that were affected by a strengthening in the U.S. dollar, disproportionately larger collections in 2014 from the Spanish government, lower U.S. collections in the second half of 2015 from delays associated with the second phase of an ERP implementation, and higher U.S. collections in 2014 resulting from delays caused by the first deployment of a new ERP system, partially offset by
- less cash paid to suppliers and employees primarily related to a decrease in foreign exchange rates, and reductions in force, partially offset by higher performance-based compensation payments, and
- a payment of $55.1 million for the settlement with the SEC and DOJ associated with the FCPA in the fourth quarter of 2014.

The net increase between 2014 and 2013 of $104.2 million primarily resulted from:

- higher cash received from customers primarily due to improved collections, in particular from Spain of approximately $11 million from public agencies in the first quarter of 2014, and in the U.S. after implementing the first phase of a new ERP system,
- a decrease in income taxes paid primarily due to a federal income tax quick refund of $20 million and a French income tax refund of approximately $11 million that were both related to 2013 and received in 2014, and a $5 million federal income tax extension payment in 2013,
- the absence of interest paid of $25.0 million and $12.0 million in 2013 associated with a call premium primarily due to the early redemption of the $300.0 million of 8.0% Senior Subordinated Notes on September 30, 2013,
- a settlement payment for a royalties audit of $12 million in the second quarter of 2013, partially offset by
- a payment of $55.1 million for the settlement with the SEC and DOJ associated with the FCPA in the fourth quarter of 2014.

We regularly review past due receivables to assess the allowance for doubtful accounts and believe net accounts receivable are fully realizable. We also routinely review inventory for the impact of obsolescence and changes in market prices caused by the introduction of new products, technologies and in government reimbursement policies. Cash flows from operations during the first quarter have historically had larger payments for royalties, fourth quarter sales commissions to third parties and annual employee bonuses, and expect this pattern to recur in the first quarter of 2016.

Cash Flows from Investing Activities

Net cash used in investing activities was $166.9 million and $190.5 million for 2015 and 2014, respectively, and net cash provided by investing activities was $0.9 million in 2013. Purchases, net of sales and maturities of marketable securities and investments had an overall decrease of $35.4 million in 2015 compared to 2014 primarily due to an increase in purchases, partially offset by an increase in maturities and securities sales. Purchases of marketable securities and investments, and proceeds from sales of marketable securities and investments were both lower in 2014 than 2013 primarily due to sales of securities to provide cash to redeem the $300.0 million 8.0% Senior Subordinated Notes in 2013. In addition, we purchased longer dated securities to take advantage of higher returns on investments and therefore we experienced an additional decline in maturities and redemptions of securities in 2014 compared to 2013.

Short-term restricted investments of $4.21 million in 2015 represent a money market fund for collateral that secures worker's compensation and general liability insurance. Investment income accrues to us and is recorded in Investment proceeds and miscellaneous receipts, net in the Consolidated Statements of Cash Flows.

Our investment objective is to maintain liquidity to meet anticipated operational and other corporate requirements in which capital is preserved and increased through investing in low risk, high quality securities with commensurate returns, consistent with our risk tolerance level.

Purchases of intangible assets were higher in 2014 than in 2015 and 2013 primarily due to higher purchases of licenses. Payments for acquisitions, net of cash received, and long-term investments in 2014 and 2013 were primarily due to the following:

- in April 2014, we acquired 100% of the issued and outstanding stock of GnuBIO for a total consideration of $50.4 million, which included $39.7 million paid in cash at the closing date and $10.7 million in contingent consideration potentially payable to GnuBIO's shareholders, and
- in January 2013, we acquired 100% of the outstanding shares of AbD Serotec, a division of MorphoSys AG, for total consideration of $62.2 million (net of cash received of $7.3 million).

We continue to review possible acquisitions or asset purchases to expand both our Life Science and Clinical Diagnostics segments, such as our purchase of an instrument from Propel in January 2016. We routinely meet with the principals or brokers of the subject companies. It is not certain at this time that any of these discussions involving material or significant acquisitions will advance to completion.

Capital expenditures in 2015 totaled $112.0 million, compared to $121.0 million and $106.7 million in 2014 and 2013, respectively. Capital expenditures represent the addition and replacement of production machinery and research equipment, ongoing manufacturing and facility additions for expansion, regulatory, environmental and compliance. Also included in capital expenditures are investments in business systems and data communication upgrades and enhancements. All periods include equipment placed with Clinical Diagnostics segment customers who then contract to purchase our reagents for use. As we continue to implement more phases of the ERP platform and expand our e-commerce platform, we expect capital expenditures to continue to remain historically higher for the next three years or more. However, capital expenditures were lower in 2015 as we expect the third phase of the ERP system to ramp up in 2016. Capital expenditures were higher in 2014 than in 2015 and 2013 as we were in the development stages (in which appropriate costs are capitalized) of implementing the second phase of a global single instance ERP platform. In April 2013, we implemented the first phase of the global single instance ERP platform and hence for the remainder of 2013, costs were no longer capitalized. The current estimated future project cost for global

implementation for the single instance ERP platform is projected to be $150 million to $200 million and is estimated to take more than three years to fully implement.

Cash Flows from Financing Activities

Net cash provided by financing activities was $8.6 million and $11.7 million in 2015 and 2014, respectively, and net cash used in financing activities was $311.7 million in 2013. Net cash provided by financing activities in 2015 was primarily from proceeds from issuance of our common stock. Additionally in 2015 there was a payment of $3.0 million to Propel Labs' shareholders in contingent consideration for a sales milestone that was associated with the valuation as of the 2012 acquisition date. Net cash provided by financing activities in 2014 was primarily from proceeds from issuance of our common stock. Net cash provided by financing activities in 2014 was partially offset by a payment of $2.4 million to Propel Labs' shareholders in contingent consideration for a sales milestone that was associated with the valuation as of the 2012 acquisition date, and the payment of a short-term borrowing. Net cash used in financing activities in 2013 was primarily due to the early redemption of the $300.0 million of 8.0% Senior Subordinated Notes on September 30, 2013. Also in 2013, $20.0 million was paid to Propel Labs' shareholders in contingent consideration, of which $19.9 million was associated with the valuation as of the 2012 acquisition date and the remainder was recognized in cash flows from operations. Additionally in 2013, $6.0 million was paid to QuantaLife in contingent consideration, of which $5.6 million was associated with the valuation as of the 2011 acquisition date and the remainder was recognized in cash flows from operations.

We have outstanding Senior Notes of $425.0 million, which are not due until 2020. We believe the current cash is sufficient to meet normal operating costs, and funding for research and development of new products, as well as routine outflows of capital expenditures, interest and taxes.

The Board of Directors has authorized the repurchase of up to $18.0 million of Bio-Rad's common stock, of which $3.3 million has yet to be repurchased as of December 31, 2015. The Credit Agreement may limit our ability to repurchase our stock. In accordance with the terms of awards under the 2007 Incentive Award Plan, in June 2012, we withheld 122 shares of our Class A common stock and 917 shares of our Class B common stock to satisfy tax obligations due upon the vesting of restricted stock of certain of our employees, which is considered a repurchase of our stock. All of the restricted stock vested as of December 31, 2013 and therefore we do not anticipate any repurchasing of shares for this purpose. We had no other repurchases of our stock during 2015, 2014 or 2013.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have had or are reasonably likely to have a current or future material effect on our financial condition, results of operations or liquidity.

Contractual Obligations

The following summarizes certain of our contractual obligations as of December 31, 2015 and the effect such obligations are expected to have on our cash flows in future periods (in millions):

	Payments Due by Period				
Contractual Obligations	Total	Less Than One Year	1-3 Years	3-5 Years	More than 5 Years
Long-term debt, including current portion (1)	$ 437.3	$ 0.3	$ 0.6	$ 425.5	$ 10.9
Interest payments (1)	102.3	20.7	41.4	40.2	—
Operating lease obligations (2)	162.3	41.2	59.1	34.9	27.1
Purchase obligations (3)	35.7	17.8	8.7	9.2	—
Long-term liabilities (4)	110.8	23.8	14.0	3.9	69.1

(1) These amounts represent expected cash payments, including capital lease obligations, which are included in our December 31, 2015 Consolidated Balance Sheet. Our debt is fixed and primarily consists of the 4.875% Notes. See Note 5 of the Consolidated Financial Statements for additional information about our debt.

(2) Operating lease obligations are described in Note 12 of the Consolidated Financial Statements.

(3) Purchase obligations include agreements to purchase goods or services that are enforceable and legally binding to Bio-Rad and that specify all significant terms. Purchase obligations exclude agreements that are cancelable without penalty.

(4) Excluded from this table are tax liabilities for uncertain tax positions and contingencies in the amount of $12.0 million. We are not able to reasonably estimate the timing of future cash flows of these tax liabilities, therefore, our income tax obligations are excluded from the table above. See Note 6 of the Consolidated Financial Statements for additional information about our income taxes.

Recent Accounting Standards Updates

In February 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update No. (“ASU”) 2016-02, "Leases," which will require, among other items, lessees to recognize most leases as assets and liabilities on the balance sheet. Qualitative and quantitative disclosures will be enhanced to better understand the amount, timing and uncertainty of cash flows arising from leases. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years, with early adoption permitted. ASU 2016-02 will be adopted on a modified retrospective basis, with elective reliefs, which requires application of ASU 2016-02 for all periods presented. We are currently evaluating the effect ASU 2016-02 will have on our consolidated financial statements.

In January 2016, the FASB issued ASU 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities." Amendments under ASU 2016-01, among other items, require that all equity investments in unconsolidated entities (other than those accounted for using the equity method of accounting) will generally be measured at fair value through earnings. There will no longer be an available-for-sale classification, for which changes in fair value are reported in other comprehensive income, for equity securities with readily determinable fair values. For equity investments without readily determinable fair values, the cost method is also eliminated. However, entities will be able to elect to record equity investments without readily determinable fair values at cost, less impairment, and plus or minus subsequent adjustments for observable price changes. Changes in the basis of these equity investments will be reported in current earnings. ASU 2016-01 is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. We are currently evaluating the effect ASU 2016-01 will have, if any, on our consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17, “Balance Sheet Classification of Deferred Taxes,” which requires entities to present deferred tax assets and deferred tax liabilities as noncurrent for each tax-paying jurisdiction in the Balance Sheet. Previous disclosures required entities to separate deferred tax assets and liabilities into a current amount and a noncurrent amount for each tax-paying jurisdiction. ASU 2015-17 will be effective for annual periods beginning after December 15, 2016, and interim periods within those years. ASU 2015-17 can be early adopted for any period that has not been issued on a prospective or retrospective basis. We early adopted ASU 2015-17 during the fourth quarter of 2015 on a prospective basis as a change in accounting policy and therefore prior periods were not retrospectively adjusted.

In July 2015, the FASB issued ASU 2015-11, “Simplifying the Measurement of Inventory.” Under current guidance, an entity subsequently measures inventory at the lower of cost or market, with market defined as replacement cost, net realizable value (NRV), or NRV less a normal profit margin. An entity uses current replacement cost provided that it is not above NRV (i.e., the ceiling) or below NRV less an “approximately normal profit margin” (i.e., the floor). ASU 2015-11 eliminates this analysis and requires entities to measure most inventory “at the lower of cost and NRV.” ASU 2015-11 is effective prospectively for annual periods beginning after December 15, 2016, and interim periods therein, with early adoption permitted. We are currently evaluating the effect ASU 2015-11 will have, if any, on our consolidated financial statements.

In April 2015, the FASB issued ASU 2015-03, "Simplifying the Presentation of Debt Issuance Costs." ASU 2015-03 was issued to simplify the presentation of debt issuance costs by requiring debt issuance costs to be presented as a deduction from the corresponding debt liability. This will make the presentation of debt issuance costs consistent with the presentation of debt discounts or premiums. Under current U.S. GAAP, debt issuance costs are reported on the balance sheet as assets and amortized as interest expense. Under ASU 2015-03, debt issuance costs will continue to be amortized to interest expense using the effective interest method. In August 2015, the FASB issued ASU 2015-15, "Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements" to clarify the SEC staff’s position that it 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, which is our current practice. ASU 2015-03 is effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within those fiscal years, with early adoption permitted. We will not early adopt. Debt issuance costs were not material as of December 31, 2015.

In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers,” which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. ASU 2014-09 will replace most existing revenue recognition guidance in GAAP when it becomes effective. In August 2015, the FASB issued ASU 2015-14 to defer the effective date for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. Early adoption is permitted as of the original effective date in ASU 2014-09, which is annual reporting periods beginning after December 15, 2016, however, we do not plan to early adopt. The new standard is to be applied retrospectively and permits the use of either the retrospective or cumulative effect transition method. We are currently evaluating the effect that ASU 2014-09 will have on our consolidated financial statements and related disclosures and we have not yet selected a transition method.

ITEM 7A. QUANTITIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Financial Risk Management

The main goal of Bio-Rad's financial risk management program is to reduce the variance in expected cash flows arising from unexpected foreign exchange rate and interest rate changes. Financial exposures are managed through operational means and by using various financial instruments, including cash and liquid resources, borrowings, and forward and spot foreign exchange contracts. No derivative financial instruments are entered into for the purpose of trading or speculation. Company policy requires that all derivative positions are undertaken to manage the risks arising from underlying business activities. These derivative transactions do not qualify for hedge accounting treatment. Derivative instruments used in these transactions are valued at fair value and changes in fair value are included in reported earnings.

Foreign Exchange Risk. We operate and conduct business in many countries and are exposed to movements in foreign currency exchange rates. We face transactional currency exposures that arise when we enter into transactions denominated in currencies other than U.S. dollars. Additionally, our consolidated net equity is impacted by the conversion of the net assets of our international subsidiaries for which the functional currency is not the U.S. dollar.

Foreign currency exposures are managed on a centralized basis. This allows for the netting of natural offsets and lowers transaction costs and net exposures. Where possible, we seek to manage our foreign exchange risk in part through operational means, including matching same-currency revenues to same-currency costs, and same-currency assets to same-currency liabilities. Moreover, weakening in one currency can often be offset by strengthening in another currency. Foreign exchange risk is also managed through the use of forward foreign exchange contracts. Positions are primarily in Euro, Swiss Franc, British Sterling, Singapore Dollar, Brazilian Real and Japanese Yen. The majority of forward contracts are for periods of 90 days or less. We record the change in value of our foreign currency receivables and payables as a Foreign exchange (gain) loss on our Consolidated Statements of Income along with the change in fair market value of the forward exchange contract used as an economic hedge of those assets or liabilities.

Our forward contract holdings at year-end were analyzed to determine their sensitivity to fluctuations in foreign currency exchange rates. All other variables were held constant. Market risk associated with derivative holdings is the potential change in fair value of derivative positions arising from an adverse movement in foreign exchange rates. A decline of 10% on quoted foreign exchange rates would result in an approximate net-present-value loss of $27 million on our derivative position as of December 31, 2015. This impact of a change in exchange rates excludes the offset derived from the change in value of the underlying assets and liabilities, which could reduce the adverse effect significantly.

Interest Rate Risk of Debt Instruments. Bio-Rad centrally manages the short-term cash surpluses and shortfalls of its subsidiaries. Our holdings of variable rate debt instruments at year-end were analyzed to determine their sensitivity to movements in interest rates. Due to the relatively small amount of short-term variable rate debt we have outstanding, there would not be a material impact to earnings or cash flows if interest rates moved adversely by 10%. Our long-term debt consists primarily of fixed-rate instruments, and is thus insulated from interest rate changes. As of December 31, 2015, the overall interest rate risk associated with our debt was not significant.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Bio-Rad Laboratories, Inc.:

We have audited the accompanying consolidated balance sheets of Bio-Rad Laboratories, Inc. and subsidiaries (the Company) as of December 31, 2015 and 2014, and the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2015. In connection with our audits of the consolidated financial statements, we also have audited the financial statement schedule. These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of Bio-Rad Laboratories, Inc. and subsidiaries as of December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2015, 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, present 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), Bio-Rad Laboratories, Inc.'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 29, 2016 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

San Francisco, California
February 29, 2016

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Bio-Rad Laboratories, Inc.:

We have audited Bio-Rad Laboratories, Inc.'s (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). Bio-Rad Laboratories Inc.'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 Management's Report on Internal Control Over Financial Reporting (Item 9A(b)). 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, Bio-Rad Laboratories, Inc. 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 sheets of Bio-Rad Laboratories, Inc. and subsidiaries as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2015, and our report dated February 29, 2016 expressed an unqualified opinion on those consolidated financial statements and financial statement schedule.

/s/ KPMG LLP

San Francisco, California
February 29, 2016

BIO-RAD LABORATORIES, INC.
Consolidated Balance Sheets
(In thousands, except share data)

	December 31,	
	2015	2014
ASSETS		
Current assets:		
Cash and cash equivalents	$ 457,549	$ 413,251
Short-term investments	328,718	284,384
Restricted investments	4,210	—
Accounts receivable, less allowance for doubtful accounts of $24,418 at 2015 and $27,973 at 2014	391,485	377,640
Inventories:		
Raw materials	109,928	106,028
Work in process	114,438	131,783
Finished goods	265,858	233,186
Total inventories	490,224	470,997
Prepaid expenses	94,369	108,348
Other current assets	11,041	61,747
Total current assets	1,777,596	1,716,367
Property, plant and equipment:		
Land and improvements	17,823	18,165
Buildings and leasehold improvements	276,070	282,792
Equipment	823,193	788,141
Total property, plant and equipment	1,117,086	1,089,098
Less: accumulated depreciation and amortization	(679,396)	(660,262)
Property, plant and equipment, net	437,690	428,836
Goodwill, net	495,948	500,441
Purchased intangibles, net	214,026	254,228
Other investments	719,840	389,309
Other assets	66,442	52,097
Total assets	$ 3,711,542	$ 3,341,278

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

BIO-RAD LABORATORIES, INC.
Consolidated Balance Sheets
(continued)
(In thousands, except share data)

	December 31,	
	2015	2014
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 122,391	$ 128,608
Accrued payroll and employee benefits	157,857	153,426
Current maturities of long-term debt	298	265
Income and other taxes payable	29,339	35,165
Deferred revenue	29,683	26,716
Other current liabilities	101,783	102,581
Total current liabilities	441,351	446,761
Long-term debt, net of current maturities	435,707	435,710
Deferred income taxes	233,475	154,917
Other long-term liabilities	110,506	118,735
Total liabilities	1,221,039	1,156,123
Commitments and contingent liabilities		
Stockholders' equity:		
Preferred stock, $0.0001 par value, 7,500,000 shares authorized; issued and outstanding - none	—	—
Class A common stock, $0.0001 par value; 80,000,000 shares authorized; shares issued - 24,230,448 and 23,971,808 at 2015 and 2014, respectively; shares outstanding - 24,230,326 and 23,971,686 at 2015 and 2014, respectively	2	2
Class B common stock, $0.0001 par value; 20,000,000 shares authorized; shares issued - 5,130,558 and 5,098,799 at 2015 and 2014, respectively; shares outstanding - 5,129,641 and 5,097,882 at 2015 and 2014, respectively	1	1
Additional paid-in capital	300,408	271,346
Class A treasury stock at cost, 122 shares at 2015 and 2014	(12)	(12)
Class B treasury stock at cost, 917 shares at 2015 and 2014	(89)	(89)
Retained earnings	1,808,055	1,694,962
Accumulated other comprehensive income	382,138	218,945
Total stockholders' equity	2,490,503	2,185,155
Total liabilities and stockholders' equity	$ 3,711,542	$ 3,341,278

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

BIO-RAD LABORATORIES, INC.
Consolidated Statements of Income
(In thousands, except per share data)

	Year Ended December 31,		
	2015	2014	2013
Net sales	$ 2,019,441	$ 2,175,044	$ 2,132,694
Cost of goods sold	897,771	996,527	954,216
Gross profit	1,121,670	1,178,517	1,178,478
Selling, general and administrative expense	761,990	808,200	798,070
Research and development expense	192,972	220,333	210,952
Income from operations	166,708	149,984	169,456
Interest expense	21,692	22,131	61,271
Foreign exchange losses, net	10,249	9,305	8,566
Other (income) expense, net	(11,080)	(13,009)	(12,766)
Income before income taxes	145,847	131,557	112,385
Provision for income taxes	(32,754)	(42,712)	(34,574)
Net income including noncontrolling interests	113,093	88,845	77,811
Net income attributable to noncontrolling interests	—	—	(21)
Net income attributable to Bio-Rad	$ 113,093	$ 88,845	$ 77,790
Basic earnings per share:			
Net income per basic share attributable to Bio-Rad	$ 3.87	$ 3.08	$ 2.72
Weighted average common shares - basic	29,186	28,876	28,586
Diluted earnings per share:			
Net income per diluted share attributable to Bio-Rad	$ 3.85	$ 3.05	$ 2.69
Weighted average common shares - diluted	29,409	29,133	28,906

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

BIO-RAD LABORATORIES, INC.
Consolidated Statements of Comprehensive Income
(In thousands)

	Year Ended December 31,		
	2015	2014	2013
Net income including noncontrolling interests	$ 113,093	$ 88,845	$ 77,811
Other comprehensive income:			
Foreign currency translation adjustments	(37,536)	(118,142)	16,662
Foreign other post-employment benefits adjustments, net of income taxes	(4,403)	(8,186)	36
Net unrealized holding gains on available-for-sale (AFS) investments, net of income taxes	205,132	4,556	49,651
Other comprehensive income (loss), net of income taxes	163,193	(121,772)	66,349
Comprehensive income (loss)	276,286	(32,927)	144,160
Comprehensive income attributable to noncontrolling interests	—	—	(185)
Comprehensive income (loss) attributable to Bio-Rad	$ 276,286	$ (32,927)	$ 143,975

Reclassification adjustments are calculated using the specific identification method.
The accompanying notes are an integral part of these consolidated financial statements.

BIO-RAD LABORATORIES, INC.
Consolidated Statements of Cash Flows
(In thousands)

	Year Ended December 31,		
	2015	2014	2013
Cash flows from operating activities:			
Cash received from customers	$ 1,956,084	$ 2,162,520	$ 2,090,030
Cash paid to suppliers and employees	(1,730,062)	(1,806,526)	(1,804,028)
Interest paid	(20,793)	(20,793)	(61,233)
Income tax payments	(31,715)	(28,939)	(71,144)
Settlement with the SEC and DOJ relating to the FCPA, including interest	—	(55,050)	—
Investment proceeds and miscellaneous receipts, net	11,953	15,671	16,760
Excess tax benefits from share-based compensation	(3,610)	(1,349)	(2,720)
Proceeds from forward foreign exchange contracts, net	4,353	7,778	1,471
Net cash provided by operating activities	186,210	273,312	169,136
Cash flows from investing activities:			
Capital expenditures	(112,000)	(120,999)	(106,658)
Proceeds from dispositions of property, plant and equipment	79	225	1,214
Payments for acquisitions, net of cash received, and long-term investments	(4,356)	(44,627)	(72,054)
Payments for purchases of intangible assets	(1,372)	(15,479)	(700)
Payment for purchase of restricted investment	(4,210)	—	—
Payments for purchases of marketable securities and investments	(294,497)	(205,746)	(386,714)
Proceeds from sales of marketable securities and investments	78,664	75,725	289,779
Proceeds from maturities of marketable securities and investments	170,823	120,390	276,052
Net cash (used in) provided by investing activities	(166,869)	(190,511)	919
Cash flows from financing activities:			
Net (payments) borrowings on line-of-credit arrangements and notes payable	—	(1,560)	48
Payments on long-term borrowings	(282)	(253)	(300,228)
Proceeds from issuance of common stock	8,236	15,051	11,237
Payments of contingent consideration	(2,983)	(2,374)	(25,474)
Debt issuance costs on long-term borrowings	—	(524)	—
Excess tax benefits from share-based compensation	3,610	1,349	2,720
Net cash provided by (used in) financing activities	8,581	11,689	(311,697)
Effect of foreign exchange rate changes on cash	16,376	(12,790)	9,805
Net increase (decrease) in cash and cash equivalents	44,298	81,700	(131,837)
Cash and cash equivalents at beginning of year	413,251	331,551	463,388
Cash and cash equivalents at end of year	$ 457,549	$ 413,251	$ 331,551

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

BIO-RAD LABORATORIES, INC.
Consolidated Statements of Changes in Stockholders' Equity
(In thousands)

	Common Stock	Additional Paid-in Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income	Total Bio-Rad Stockholders' Equity	Non-controlling Interests	Total Stockholders' Equity
Balance at December 31, 2012	$ 3	$ 212,244	$ (101)	$ 1,528,327	$ 274,532	$ 2,015,005	$ 535	$ 2,015,540
Net income	—	—	—	77,790	—	77,790	21	77,811
Other comprehensive income, net of tax	—	—	—	—	66,185	66,185	164	66,349
Issuance of common stock	—	11,237	—	—	—	11,237	—	11,237
Stock compensation expense	—	13,657	—	—	—	13,657	—	13,657
Tax benefit-exercise stock options	—	3,135	—	—	—	3,135	—	3,135
Purchase of additional controlling interests and other	—	(287)	—	—	—	(287)	(720)	(1,007)
Balance at December 31, 2013	3	239,986	(101)	1,606,117	340,717	2,186,722	—	2,186,722
Net income	—	—	—	88,845	—	88,845	—	88,845
Other comprehensive loss, net of tax	—	—	—	—	(121,772)	(121,772)	—	(121,772)
Issuance of common stock	—	15,051	—	—	—	15,051	—	15,051
Stock compensation expense	—	14,888	—	—	—	14,888	—	14,888
Tax benefit-exercise stock options	—	1,421	—	—	—	1,421	—	1,421
Balance at December 31, 2014	3	271,346	(101)	1,694,962	218,945	2,185,155	—	2,185,155
Net income	—	—	—	113,093	—	113,093	—	113,093
Other comprehensive income, net of tax	—	—	—	—	163,193	163,193	—	163,193
Issuance of common stock	—	8,236	—	—	—	8,236	—	8,236
Stock compensation expense	—	16,983	—	—	—	16,983	—	16,983
Tax benefit-exercise stock options	—	3,843	—	—	—	3,843	—	3,843
Balance at December 31, 2015	$ 3	$ 300,408	$ (101)	$ 1,808,055	$ 382,138	$ 2,490,503	$ —	$ 2,490,503

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

1. SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The consolidated financial statements include the accounts of Bio-Rad Laboratories, Inc. and all of our wholly and majority owned subsidiaries (referred to in this report as "Bio-Rad," "we," "us" and "our") after elimination of intercompany balances and transactions. The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

We evaluate subsequent events and the evidence they provide about conditions existing at the date of the balance sheet as well as conditions that arose after the balance sheet date but through the date the financial statements are issued. The effects of conditions that existed at the balance sheet date are recognized in the financial statements. Events and conditions arising after the balance sheet date but before the financial statements are issued are evaluated to determine if disclosure is required to keep the financial statements from being misleading. To the extent such events and conditions exist, disclosures are made regarding the nature of events and the estimated financial effects for those events and conditions.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and highly liquid investments with original maturities of three months or less which are readily convertible into cash. Cash equivalents are stated at cost, which approximates fair value.

Short-term Restricted Investments

Short-term restricted investments of $4.21 million at December 31, 2015 represent a money market fund for collateral that secures worker's compensation and general liability insurance. Investment income accrues to Bio-Rad and is recorded in Cash and cash equivalents in the Consolidated Balance Sheet.

Available-for-Sale Investments

Available-for-sale investments consist of corporate obligations, municipal securities, asset backed securities, U.S. government sponsored agencies and marketable equity securities. Management classifies investments at the time of purchase and reevaluates such classification at each balance sheet date. Investments with maturities beyond one year may be classified as short-term based on their liquid nature and because such marketable securities represent the investment of cash that is available for current operations. Available-for-sale investments are reported at fair value based on quoted market prices and other observable market data. Unrealized gains and losses are reported as a component of other comprehensive income, net of any related tax effect. Unrealized losses are charged against income when a decline in the fair value of an individual security is determined to be other-than-temporary. We review our available-for-sale investments for other-than-temporary losses on a quarterly basis. Realized gains and losses and other-than-temporary impairments on investments are included in Other (income) expense, net (see Note 10).

Concentration of Credit Risk

Financial instruments that potentially subject us to concentration of credit risk consist primarily of cash and cash equivalents, investments, foreign exchange contracts and trade accounts receivable. Cash and cash equivalents and investments are placed with various highly rated major financial institutions located in different geographic regions. Bio-Rad has not sustained significant losses from instruments held at financial institutions.

The forward contracts used in managing our foreign currency 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 domestic and international financial institutions. In the event of non-performance by these counterparties, the carrying values of our financial instruments represent the maximum amount of loss we would have incurred as of our fiscal year-end. However, we do not expect to record any losses as a result of counterparty default.

We perform credit evaluation procedures related to our trade receivables and with the exception of certain developing countries, generally do not require collateral. As a result of increased risk in certain developing countries, some Bio-Rad sales are subject to collateral letters of credit from our customers. Credit risk for trade accounts receivable is generally limited due to the large number of customers and their dispersion across many geographic areas. However, a significant amount of trade receivables are with national healthcare systems in countries within the European Union.

Accounts Receivable

We maintain an allowance for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. The amount of the allowance is determined by analyzing known uncollectible accounts, aged receivables, economic conditions in the customers' country or industry, historical losses and our customers' credit-worthiness. Amounts later determined and specifically identified to be uncollectible are charged or written off against this allowance.

Inventory

Inventories are valued at the lower of actual cost or market (net realizable value) and include material, labor and overhead costs. The first-in, first-out method is used to relieve inventory for products sold.

Property, Plant and Equipment

Property, plant and equipment are carried at cost, less accumulated depreciation and amortization. Included in property, plant and equipment are buildings and equipment acquired under capital lease arrangements, reagent rental equipment and capitalized software, including costs for software developed or obtained for internal use. Property, plant and equipment are assessed for impairment quarterly or whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

Depreciation is computed on a straight-line basis over the estimated useful lives of the assets. Buildings and leasehold improvements are amortized over 15-30 years or the term of the leases or life of the improvements, whichever is shorter. With the exception of reagent rental equipment, which is amortized over a 1-5 year period, equipment and capitalized software is depreciated over 3-12 years.

Goodwill

Goodwill represents the excess of the cost over the fair value of net tangible and identifiable intangible assets of acquired businesses. Goodwill is assessed for impairment by applying fair value based tests annually in the fourth quarter or whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. We perform impairment tests of goodwill at our reporting unit level, which is one level below our operating segments. Our reporting units are identified as components for which discrete financial information is available and is regularly reviewed by management. Goodwill amounts are assigned to reporting units at the time of acquisition.

The goodwill impairment test consists of a two-step process. The first step of the goodwill impairment test, used to identify potential impairment, compares the fair value of a reporting unit to its carrying value, including goodwill. We use a projected discounted cash flow model to determine the fair value of a reporting unit. If the fair value of the reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired, and the

second step of the impairment test is not required. The second step, if required, compares the implied fair value of the reporting unit goodwill with the carrying amount of that goodwill. The fair value of a reporting unit is allocated to all of the assets and liabilities of that unit (including any unrecognized intangible assets) as if the reporting unit had been acquired in a business combination and the fair value of the reporting unit was the price paid to acquire the reporting unit. If the carrying amount of the reporting unit's goodwill exceeds its implied fair value, an impairment charge is recognized in an amount equal to that excess.

Long-Lived Assets

For purposes of recognition and measurement of an impairment loss, a long-lived asset or assets are grouped with other assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. We assess the impairment of long-lived assets (including identifiable intangible assets) quarterly or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors that we consider important that could trigger an impairment review include:

- significant under-performance relative to expected, historical or projected future operating results;
- significant changes in the manner of use of the long-lived assets, intangible assets or the strategy for our overall business;
- a current expectation that, more likely than not, a long-lived asset will be sold or otherwise disposed of at a loss before the end of its previously estimated useful life; and
- significant negative industry, legal, regulatory or economic trends.

When management determines that the carrying value of long-lived assets may not be recoverable based upon the existence of one or more of the above indicators of impairment, we test for any impairment based on a projected undiscounted cash flow method. Projected future operating results and cash flows of the asset or asset group are used to establish the fair value used in evaluating the carrying value of long-lived and intangible assets. We estimate the future cash flows of the long-lived assets using current and long-term financial forecasts. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. If this is the case, an impairment loss would be recognized. The impairment loss recognized is the amount by which the carrying amount exceeds the fair value.

Income Taxes

We account for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities reflect the tax effects of losses, credits, and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. They are determined using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date. Deferred tax assets and liabilities are presented as noncurrent for each tax-paying jurisdiction in the Balance Sheet as a result of our early adoption of Accounting Standards Update No. 2015-17, "Balance Sheet Classification of Deferred Taxes."

We record deferred tax assets to the extent we believe these assets will more likely than not be realized. In making such determination, we consider all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies and recent financial operations. To the extent we determine that we are able to realize our deferred income tax assets in the future in excess of their net recorded amount, we make an adjustment to the valuation allowance which may reduce the provision for income taxes. When we establish or reduce the valuation allowance against our deferred tax assets, our provision for income taxes will increase or decrease, respectively, in the period that determination to change the valuation allowance is made.

We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefits recognized in the financial statements on a particular tax position are measured based on the largest benefit

that has a greater than a 50% likelihood of being realized upon settlement. The amount of unrecognized tax benefits is adjusted as appropriate for changes in facts and circumstances, such as significant amendments to existing tax law, new regulations or interpretations by the taxing authorities, new information obtained during a tax examination, or resolution of an examination. We recognize both accrued interest and penalties, where appropriate, related to unrecognized tax benefits in the provision for income taxes.

Revenue Recognition

Revenue is recognized when pervasive evidence of an arrangement exists, the price to the buyer is fixed or determinable, collectability is reasonably assured and title has passed to the customer or product has been delivered absent specific contractual specifications. Revenue associated with equipment that requires factory installation is not recorded until installation is complete and customer acceptance, if required contractually, has occurred. At the time revenue is recognized, a provision is recognized for estimated product returns. Service revenues on extended warranty contracts are recognized ratably over the life of the service agreement, or as services are performed if not under contract. Net sales are the actual selling price of products to customers. Any taxes billed to the customer (sales tax, value added tax, etc.) shall be credited to the tax liability accounts and excluded from net sales.

Reagent agreements are a diagnostic industry sales method that provides use of an instrument and consumables (reagents) to a customer on a per test basis. We evaluate our reagent agreements and account for these contracts under the guidance pertaining to accounting for revenue arrangements with multiple deliverables. Our reagent agreements represent one unit of accounting as the instrument and consumables are interdependent in producing a diagnostic result that neither has a stand-alone value with respect to these agreements. All revenues that we earn under our reagent agreements are recognized pursuant to the terms of each agreement and are based and entirely contingent upon either (i) when the consumables to conduct a fixed number of tests are delivered or (ii) as reported by the customer on a per test basis.

Shipping and Handling

We classify all freight costs billed to customers as Net sales. Related freight costs are included in Cost of goods sold.

Warranty

We warrant certain equipment against defects in design, materials and workmanship, mostly for a period of one year. Upon delivery of that equipment, we establish, as part of Cost of goods sold, a provision for the expected costs of such warranty based on historical experience, specific warranty terms and customer feedback. A review is performed on a quarterly basis to assess the adequacy of our warranty accrual.

Changes in the warranty accrual, included in Other current liabilities and Other long-term liabilities, were as follows (in millions):

	2015	2014
January 1	$ 17.8	$ 15.6
Provision for warranty	30.6	28.6
Actual warranty costs	(31.0)	(26.4)
December 31	$ 17.4	$ 17.8

Research and Development

Internal research and development costs are expensed as incurred. Third-party research and development costs are expensed when the contracted work has been performed.

Foreign Currency

Balance sheet accounts of international subsidiaries are translated at the current exchange rates as of the end of each accounting period. Income statement items are translated at average exchange rates for the period. The resulting translation adjustments are recorded as a separate component of stockholders' equity.

Foreign currency transaction gains and losses are included in Foreign exchange losses, net in the Consolidated Statements of Income. Transaction gains and losses result primarily from fluctuations in exchange rates when intercompany receivables and payables are denominated in currencies other than the functional currency of our subsidiary that recorded the transaction.

Forward Foreign Exchange Contracts

As part of distributing our products, we regularly enter into intercompany transactions. We enter into forward foreign exchange contracts to manage foreign exchange risk of future movements in exchange rates that affect foreign currency denominated intercompany receivables and payables. We do not use derivative financial instruments for speculative or trading purposes, nor do we seek hedge accounting treatment for any of our contracts. As a result, these contracts, generally with maturity dates of 90 days or less and denominated primarily in currencies of industrial countries, are recorded as an asset or liability measured at their fair value at each balance sheet date. The resulting gains or losses offset exchange gains or losses, on the related receivables and payables, all of which are recorded in Foreign exchange losses, net in the Consolidated Statements of Income.

Noncontrolling Interests

A noncontrolling interest in a subsidiary is an ownership interest in a consolidated entity that is reported as equity in the consolidated financial statements and separate from Bio-Rad's equity. In addition, net income attributable to noncontrolling interests is reported separately from net income attributable to Bio-Rad in the consolidated financial statements. Our consolidated statements presented the full amount of assets, liabilities, income and expenses of all of our consolidated subsidiaries, with a partially offsetting amount shown in noncontrolling interests for the portion of assets and liabilities that were not controlled by us.

In February 2013, we acquired the remaining outstanding shares of Distribuidora de Analitica para Medicina Iberica S.A. (DiaMed Spain) from the remaining noncontrolling shareholder for approximately 0.6 million Euros or $0.9 million in cash. This acquisition was accounted for as an equity transaction, which reduced Bio-Rad's noncontrolling interests and additional paid-in capital by $0.6 million and $0.3 million, respectively, and therefore since that date there are no noncontrolling interests in Bio-Rad.

Share-Based Compensation Plans

Stock-based compensation expense for all share-based payment awards granted is determined based on the grant-date fair value. We recognize these compensation costs net of estimated forfeitures over the requisite service period of the award, which is generally the vesting term of the share-based payment awards. We estimated the forfeiture rate based on our historical experience. These plans are described more fully in Note 9.

Earnings Per Share

Basic earnings per share is computed by dividing net income attributable to Bio-Rad by the weighted average number of common shares outstanding for that period. Diluted earnings per share takes into account the effect of dilutive instruments, such as stock options and restricted stock, and uses the average share price for the period in determining the number of potential common shares that are to be added to the weighted average number of shares outstanding. Potential common shares are excluded from the diluted earnings per share calculation if the effect would be anti-dilutive.

The weighted average number of common shares outstanding used to calculate basic and diluted earnings per share and the anti-dilutive shares are as follows (in thousands):

	Year Ended December 31,		
	2015	2014	2013
Basic weighted average shares outstanding	29,186	28,876	28,586
Effect of potentially dilutive stock options and restricted stock awards	223	257	320
Diluted weighted average common shares	29,409	29,133	28,906
Anti-dilutive stock options and restricted stock awards excluded from the computation of diluted EPS	109	122	107

Fair Value of Financial Instruments

For certain financial instruments, including cash and cash equivalents, short-term investments, accounts receivable, marketable securities, notes payable, accounts payable and foreign exchange contracts, the carrying amounts approximate fair value.

The estimated fair value of financial instruments is based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) using available market information or other appropriate valuation methodologies in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. Estimates are not necessarily indicative of the amounts that could be realized in a current market exchange as considerable judgment is required in interpreting market data used to develop estimates of fair value. The use of different market assumptions or estimation techniques could have a material effect on the estimated fair value (see Note 3).

Recent Accounting Standards Updates

In February 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update No. (“ASU”) 2016-02, "Leases," which will require, among other items, lessees to recognize most leases as assets and liabilities on the balance sheet. Qualitative and quantitative disclosures will be enhanced to better understand the amount, timing and uncertainty of cash flows arising from leases. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years, with early adoption permitted. ASU 2016-02 will be adopted on a modified retrospective basis, with elective reliefs, which requires application of ASU 2016-02 for all periods presented. We are currently evaluating the effect ASU 2016-02 will have on our consolidated financial statements.

In January 2016, the FASB issued ASU 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities." Amendments under ASU 2016-01, among other items, require that all equity investments in unconsolidated entities (other than those accounted for using the equity method of accounting) will generally be measured at fair value through earnings. There will no longer be an available-for-sale classification, for which changes in fair value are reported in other comprehensive income, for equity securities with readily determinable fair values. For equity investments without readily determinable fair values, the cost method is also eliminated. However, entities will be able to elect to record equity investments without readily determinable fair values at cost, less impairment, and plus or minus subsequent adjustments for observable price changes. Changes in the basis of these equity investments will be reported in current earnings. ASU 2016-01 is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. We are currently evaluating the effect ASU 2016-01 will have, if any, on our consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17, “Balance Sheet Classification of Deferred Taxes,” which requires entities to present deferred tax assets and deferred tax liabilities as noncurrent for each tax-paying jurisdiction in the Balance Sheet. Previous disclosures required entities to separate deferred tax assets and liabilities into a current amount and a noncurrent amount for each tax-paying jurisdiction. ASU 2015-17 will be effective for annual periods beginning after December 15, 2016, and interim periods within those years. ASU 2015-17 can be early adopted for any period that has not been issued on a prospective or retrospective basis. We early adopted ASU 2015-17 during the fourth quarter of 2015 on a prospective basis as a change in accounting policy and therefore prior periods were not retrospectively adjusted.

In July 2015, the FASB issued ASU 2015-11, “Simplifying the Measurement of Inventory.” Under current guidance, an entity subsequently measures inventory at the lower of cost or market, with market defined as replacement cost, net realizable value (NRV), or NRV less a normal profit margin. An entity uses current replacement cost provided that it is not above NRV (i.e., the ceiling) or below NRV less an “approximately normal profit margin” (i.e., the floor). ASU 2015-11 eliminates this analysis and requires entities to measure most inventory “at the lower of cost and NRV.” ASU 2015-11 is effective prospectively for annual periods beginning after December 15, 2016, and interim periods therein, with early adoption permitted. We are currently evaluating the effect ASU 2015-11 will have, if any, on our consolidated financial statements.

In April 2015, the FASB issued ASU 2015-03, "Simplifying the Presentation of Debt Issuance Costs." ASU 2015-03 was issued to simplify the presentation of debt issuance costs by requiring debt issuance costs to be presented as a deduction from the corresponding debt liability. This will make the presentation of debt issuance costs consistent with the presentation of debt discounts or premiums. Under current U.S. GAAP, debt issuance costs are reported on the balance sheet as assets and amortized as interest expense. Under ASU 2015-03, debt issuance costs will continue to be amortized to interest expense using the effective interest method. In August 2015, the FASB issued ASU 2015-15, "Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements" to clarify the SEC staff’s position that it 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, which is our current practice. ASU 2015-03 is effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within those fiscal years, with early adoption permitted. We will not early adopt. Debt issuance costs were not material as of December 31, 2015.

In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers,” which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. ASU 2014-09 will replace most existing revenue recognition guidance in GAAP when it becomes effective. In August 2015, the FASB issued ASU 2015-14 to defer the effective date for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. Early adoption is permitted as of the original effective date in ASU 2014-09, which is annual reporting periods beginning after December 15, 2016, however, we do not plan to early adopt. The new standard is to be applied retrospectively and permits the use of either the retrospective or cumulative effect transition method. We are currently evaluating the effect that ASU 2014-09 will have on our consolidated financial statements and related disclosures and we have not yet selected a transition method.

2. ACQUISITIONS

GnuBIO, Inc.

In April 2014, we acquired 100.0% of the issued and outstanding stock of GnuBIO, Inc. (GnuBIO). This acquisition was accounted for as a business combination as GnuBIO represents an integrated set of activities and assets capable of being conducted and managed for the purpose of providing a return and therefore constitutes a business in accordance with GAAP. The amount of acquisition-related costs was minimal as Bio-Rad primarily represented itself during the acquisition process. This business acquisition is included in our Clinical Diagnostics segment's results of operations from the acquisition date. We believe that GnuBIO's innovative DNA workflow is well-suited for the clinical diagnostics sequencing market and will leverage our leadership role in the area of droplet digital PCR.

The final fair values of the net assets acquired from GnuBIO as of the acquisition date were determined to be $46.4 million of indefinite-lived intangible assets (specifically in-process research and development or "IPR&D"), $13.5 million of goodwill and $9.5 million of net tangible liabilities. The goodwill recorded will not be deductible for income tax purposes.

The fair value of the consideration as of the acquisition date was $50.4 million, which included $39.7 million paid in cash at the closing date and $10.7 million in contingent consideration potentially payable to GnuBIO's shareholders. The contingent consideration was based on a probability-weighted income approach that could reach $70.0 million upon the achievement of all development/regulatory and sales milestones. The contingent consideration for the development/regulatory milestones was valued at $10.7 million, based on assumptions regarding the probability of achieving the milestones, with such amounts discounted to present value. The contingent consideration for the sales milestones was determined to be negligible, using the risk-neutral probability of being in the money based on a Black-Scholes framework. The sales that are required under the purchase agreement have a low probability of obtaining the thresholds. See Note 3 for further discussion.

3. FAIR VALUE MEASUREMENTS

We determine the fair value of an asset or liability based on the assumptions that market participants would use in pricing the asset or liability in an orderly transaction between market participants at the measurement date. The identification of market participant assumptions provides a basis for determining what inputs are to be used for pricing each asset or liability. A fair value hierarchy has been established which gives precedence to fair value measurements calculated using observable inputs over those using unobservable inputs. This hierarchy prioritizes the inputs into three broad levels as follows:

- Level 1: Quoted prices in active markets for identical instruments
- Level 2: Other significant observable inputs (including quoted prices in active markets for similar instruments)
- Level 3: Significant unobservable inputs (including assumptions in determining the fair value of certain investments)

Financial assets and liabilities carried at fair value and measured on a recurring basis as of December 31, 2015 are classified in the hierarchy as follows (in millions):

	Level 1	Level 2	Level 3	Total
Financial Assets Carried at Fair Value:				
Cash equivalents (a):				
Commercial paper	$ —	$ 33.2	$ —	$ 33.2
Foreign government obligations	—	0.6	—	$ 0.6
Foreign time deposits	11.9	—	—	11.9
U.S. government sponsored agencies	—	14.6	—	14.6
Money market funds	11.3	—	—	11.3
Total cash equivalents	23.2	48.4	—	71.6
Restricted investment:	4.2	—	—	4.2
Available-for-sale investments (b):				
Corporate debt securities	—	156.9	—	156.9
U.S. government sponsored agencies	—	74.8	—	74.8
Foreign government obligations	—	4.6	—	4.6
Municipal obligations	—	6.4	—	6.4
Marketable equity securities	660.1	—	—	660.1
Asset-backed securities	—	54.8	—	54.8
Total available-for-sale investments	660.1	297.5	—	957.6
Forward foreign exchange contracts (c)	—	0.9	—	0.9
Total financial assets carried at fair value	$ 687.5	$ 346.8	$ —	$ 1,034.3
Financial Liabilities Carried at Fair Value:				
Forward foreign exchange contracts (d)	$ —	$ 1.1	$ —	$ 1.1
Contingent consideration (e)	—	—	19.1	19.1
Total financial liabilities carried at fair value	$ —	$ 1.1	$ 19.1	$ 20.2

Financial assets and liabilities carried at fair value and measured on a recurring basis as of December 31, 2014 are classified in the hierarchy as follows (in millions):

	Level 1	Level 2	Level 3	Total
Financial Assets Carried at Fair Value:				
Cash equivalents (a):				
Commercial paper	$ —	$ 4.0	—	$ 4.0
Foreign time deposits	16.5	—	—	16.5
Money market funds	2.2	—	—	2.2
Total cash equivalents	18.7	4.0	—	22.7
Available-for-sale investments (b):				
Corporate debt securities	—	139.9	—	139.9
Foreign brokered certificates of deposit	—	5.2	—	5.2
U.S. government sponsored agencies	—	47.5	—	47.5
Foreign government obligations	—	4.0	—	4.0
Municipal obligations	—	6.5	—	6.5
Marketable equity securities	334.4	—	—	334.4
Asset-backed securities	—	48.4	—	48.4
Total available-for-sale investments	334.4	251.5	—	585.9
Forward foreign exchange contracts (c)	—	0.6	—	0.6
Total financial assets carried at fair value	$ 353.1	$ 256.1	—	$ 609.2
Financial Liabilities Carried at Fair Value:				
Forward foreign exchange contracts (d)	$ —	$ 1.7	—	$ 1.7
Contingent consideration (e)	—	—	27.7	27.7
Total financial liabilities carried at fair value	$ —	$ 1.7	$ 27.7	$ 29.4

(a) Cash equivalents are included in Cash and cash equivalents in the Consolidated Balance Sheets.

(b) Available-for-sale investments are included in the following accounts in the Consolidated Balance Sheets (in millions):

	December 31, 2015	December 31, 2014
Short-term investments	$ 328.7	$ 284.4
Other investments	628.9	301.5
Total	$ 957.6	$ 585.9

(c) Forward foreign exchange contracts in an asset position are included in Other current assets in the Consolidated Balance Sheets.

(d) Forward foreign exchange contracts in a liability position are included in Other current liabilities in the Consolidated Balance Sheets.

(e) Contingent consideration liabilities are included in the following accounts in the Consolidated Balance Sheets (in millions):

	December 31, 2015	December 31, 2014
Other current liabilities	$ 13.5	$ 13.1
Other long-term liabilities	5.6	14.6
Total	$ 19.1	$ 27.7

During the third quarter of 2012, we recognized a contingent consideration liability of $44.6 million upon our acquisition of a new cell sorting system from Propel Labs, Inc. The fair value of the contingent consideration was based on a probability-weighted income approach related to the achievement of certain development and sales milestones. The development milestone was achieved and paid in 2013. The first sales milestone was reached, resulting in payments of $2.4 million and $3.0 million in the fourth quarter of 2014 and the first quarter of 2015, respectively. During 2015, the contingent consideration was revalued by a decrease of $5.6 million to its estimated fair value of $9.1 million as of December 31, 2015.

During the second quarter of 2014, we recognized a contingent consideration liability upon our acquisition of GnuBIO. At the acquisition date, the contingent consideration was based on a probability-weighted income approach that could reach $70.0 million upon the achievement of all development/regulatory and sales milestones. The contingent consideration for the development/regulatory milestones was valued at $10.7 million at the acquisition date based on assumptions regarding the probability of achieving the milestones, with such amounts discounted to present value. The contingent consideration related to the development/regulatory milestones was revalued to a fair value of $10.0 million as of December 31, 2015 and 2014. The contingent consideration for the sales milestones at the acquisition date and at December 31, 2015 was determined to be negligible, using the risk-neutral probability of being in the money based on a Black-Scholes framework. The sales that are required under the purchase agreement have a low probability of obtaining the thresholds.

The following table provides a reconciliation of the Level 3 contingent consideration liabilities measured at estimated fair value based on original valuations and updated quarterly for the year ended December 31, 2015 (in millions):

	2015
Cell sorting system:	
January 1	$ 17.7
Payment of sales milestone	(3.0)
Net decrease in estimated fair value of contingent consideration included in Selling, general and administrative expense	(5.6)
December 31	$ 9.1

The following table provides quantitative information about Level 3 inputs for fair value measurement of our contingent consideration liabilities as of December 31, 2015. Significant increases or decreases in these inputs in isolation could result in a significantly lower or higher fair value measurement.

			Range	
	Valuation Technique	Unobservable Input	From	To
Cell sorting system	Probability-weighted income approach	Sales milestone:		
		Credit adjusted discount rates	0.29%	0.83%
		Projected volatility of growth rates	10.0%	N/A
		Market price of risk	1.30%	N/A

To estimate the fair value of Level 2 debt securities as of December 31, 2015 and 2014, our primary pricing provider uses S&P Capital IQ as the primary pricing source. Our pricing process allows us to select a hierarchy of pricing sources for securities held. The chosen pricing hierarchy for our Level 2 securities, other than certificates of deposit and commercial paper, is S&P Capital IQ as the primary pricing source and then our custodian as the secondary pricing source. If S&P Capital IQ does not price a Level 2 security that we hold, then the pricing provider will utilize our custodian supplied pricing.

For commercial paper as of December 31, 2015 and 2014, pricing is determined by a straight-line calculation, starting with the purchase price on the date of purchase and increasing to par at maturity. Interest bearing certificates of deposit and commercial paper are priced at par.

In addition to the above, our primary pricing provider performed daily reasonableness testing of S&P Capital IQ prices to custodian reported prices. Prices outside a tolerable variance of approximately 1% are investigated and resolved.

Available-for-sale investments consist of the following (in millions):

	December 31, 2015			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Short-term investments:				
Corporate debt securities	$ 157.2	$ 0.1	$ (0.4)	$ 156.9
Municipal obligations	6.4	—	—	6.4
Asset-backed securities	54.8	—	(0.2)	54.6
U.S. government sponsored agencies	74.9	0.1	(0.2)	74.8
Foreign government obligations	4.6	—	—	4.6
Marketable equity securities	29.4	2.7	(0.7)	31.4
	327.3	2.9	(1.5)	328.7
Long-term investments:				
Marketable equity securities	54.5	574.2	—	628.7
Asset-backed securities	0.3	—	(0.1)	0.2
	54.8	574.2	(0.1)	628.9
Total	$ 382.1	$ 577.1	$ (1.6)	$ 957.6

	December 31, 2014			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Short-term investments:				
Corporate debt securities	$ 139.7	$ 0.4	$ (0.2)	$ 139.9
Foreign brokered certificates of deposit	5.2	—	—	5.2
Municipal obligations	6.5	—	—	6.5
Asset-backed securities	48.2	—	(0.2)	48.0
U.S. government sponsored agencies	47.4	0.1	—	47.5
Foreign government obligations	4.0	—	—	4.0
Marketable equity securities	29.0	4.5	(0.2)	33.3
	280.0	5.0	(0.6)	284.4
Long-term investments:				
Marketable equity securities	54.5	246.6	—	301.1
Asset-backed securities	0.4	—	—	0.4
	54.9	246.6	—	301.5
Total	$ 334.9	$ 251.6	$ (0.6)	$ 585.9

The unrealized gains of our long-term marketable equity securities are primarily due to our investment in Sartorius AG preferred shares.

The following is a summary of investments with gross unrealized losses and the associated fair value (in millions):

	December 31, 2015	December 31, 2014
Fair value of investments in a loss position 12 months or more	$ 10.4	$ 8.4
Fair value of investments in a loss position less than 12 months	$ 204.0	$ 90.7
Gross unrealized losses for investments in a loss position 12 months or more	$ 0.4	$ 0.2
Gross unrealized losses for investments in a loss position less than 12 months	$ 1.2	$ 0.4

The unrealized losses on these securities are due to a number of factors, including changes in interest rates, changes in economic conditions and changes in market outlook for various industries, among others. Because Bio-Rad has the ability and intent to hold these investments with unrealized losses until a recovery of fair value, or for a reasonable period of time sufficient for a forecasted recovery of fair value, which may be maturity, we do not consider these investments to be other-than-temporarily impaired at December 31, 2015 or at December 31, 2014.

As part of distributing our products, we regularly enter into intercompany transactions. We enter into forward foreign exchange contracts to manage foreign exchange risk of future movements in foreign exchange rates that affect foreign currency denominated intercompany receivables and payables. We do not use derivative financial instruments for speculative or trading purposes. We do not seek hedge accounting treatment for these contracts. As a result, these contracts, generally with maturity dates of 90 days or less and denominated primarily in currencies of industrial countries, are recorded at their fair value at each balance sheet date. The notional principal amounts provide one measure of the transaction volume outstanding as of December 31, 2015 and do not represent the amount of Bio-Rad's exposure to loss. The estimated fair value of these contracts was derived using the spot rates from Reuters on the last business day of the quarter and the points provided by counterparties. The resulting gains

or losses offset exchange gains or losses on the related receivables and payables, both of which are included in Foreign exchange losses, net in the Consolidated Statements of Income.

The following is a summary of our forward foreign currency exchange contracts (in millions):

	December 31, 2015
Contracts maturing in January through April 2016 to sell foreign currency:	
Notional value	$ 28.1
Unrealized loss	$ 0.1
Contracts maturing in January through April 2016 to purchase foreign currency:	
Notional value	$ 287.4
Unrealized loss	$ 0.1

The following is a summary of the amortized cost and estimated fair value of our debt securities at December 31, 2015 by contractual maturity date (in millions):

	Amortized Cost	Estimated Fair Value
Mature in less than one year	$ 104.9	$ 104.8
Mature in one to five years	143.0	142.7
Mature in more than five years	50.3	50.0
Total	$ 298.2	$ 297.5

The estimated fair value of financial instruments that are not recognized at fair value in the Consolidated Balance Sheets and are included in Other investments, are presented in the table below. Fair value has been determined using significant observable inputs, including quoted prices in active markets for similar instruments. Estimates are not necessarily indicative of the amounts that could be realized in a current market exchange as considerable judgment is required in interpreting market data used to develop estimates of fair value. The use of different market assumptions or estimation techniques could have a material effect on the estimated fair value. Other investments include financial instruments, the majority of which has fair value based on similar, actively traded stock adjusted for various discounts, including a discount for marketability. Long-term debt, excluding leases and current maturities, has an estimated fair value based on quoted market prices for the same or similar issues.

The estimated fair value of the financial instruments discussed above and the level of the fair value hierarchy within which the fair value measurement is categorized are as follows (in millions):

	December 31, 2015			December 31, 2014		
	Carrying Amount	Estimated Fair Value	Fair Value Hierarchy Level	Carrying Amount	Estimated Fair Value	Fair Value Hierarchy Level
Other investments	$ 86.5	$ 843.2	2	$ 82.6	$ 401.1	2
Total long-term debt, excluding leases and current maturities	$ 423.7	$ 454.3	2	$ 423.5	$ 454.9	2

We own shares of ordinary voting stock of Sartorius AG (Sartorius), of Goettingen, Germany, a process technology supplier to the biotechnology, pharmaceutical, chemical and food and beverage industries. We own over 35% of the outstanding voting shares (excluding treasury shares) of Sartorius as of December 31, 2015. The Sartorius family trust and Sartorius family members hold a controlling interest of the outstanding voting shares. We do not have any representative or designee on Sartorius' board of directors, nor do we have the ability to exercise significant influence over the operating and financial policies of Sartorius. We account for this investment using the cost method. The carrying value of this investment is included in Other investments in our Consolidated Balance Sheets. As the stock is thinly traded and in conjunction with the valuation method discussed above, we have classified the estimated fair value as Level 2. The Level 2 classification is appropriate given the valuation method employed, which incorporates an observable input of the fair value of the Sartorius' actively traded preferred stock.

4. GOODWILL AND OTHER PURCHASED INTANGIBLE ASSETS

Changes to goodwill by segment were as follows (in millions):

	2015			2014		
	Life Science	Clinical Diagnostics	Total	Life Science	Clinical Diagnostics	Total
Balances as of January 1:						
Goodwill	$ 207.7	$ 320.9	$ 528.6	$ 209.0	$ 337.0	$ 546.0
Accumulated impairment losses and write-offs	(27.2)	(1.0)	(28.2)	(27.2)	(1.0)	(28.2)
Goodwill, net	180.5	319.9	500.4	181.8	336.0	517.8
Acquisitions	—	—	—	—	13.5	13.5
Currency fluctuations	(0.5)	(4.0)	(4.5)	(1.3)	(29.6)	(30.9)
Balances as of December 31:						
Goodwill	207.2	316.9	524.1	207.7	320.9	528.6
Accumulated impairment losses and write-offs	(27.2)	(1.0)	(28.2)	(27.2)	(1.0)	(28.2)
Goodwill, net	$ 180.0	$ 315.9	$ 495.9	$ 180.5	$ 319.9	$ 500.4

In conjunction with the acquisition of 100% of the outstanding stock of GnuBIO, Inc. in our Clinical Diagnostics segment in April 2014, we recorded $13.5 million of goodwill and $46.4 million of in-process research and development, an indefinite-lived intangible asset.

Information regarding our identifiable purchased intangible assets with definite and indefinite lives is as follows (in millions):

	December 31, 2015			
	Average Remaining Life (years)	Purchase Price	Accumulated Amortization	Net Carrying Amount
Customer relationships/lists	2-10	$ 84.7	$ (46.8)	$ 37.9
Know how	1-10	184.0	(121.6)	62.4
Developed product technology	4-12	101.3	(48.9)	52.4
Licenses	3-10	39.2	(28.5)	10.7
Tradenames	5-9	3.5	(2.4)	1.1
Covenants not to compete	3-7	4.8	(1.7)	3.1
Total definite-lived intangible assets		417.5	(249.9)	167.6
In-process research and development		46.4	—	46.4
Total purchased intangible assets		$ 463.9	$ (249.9)	$ 214.0

	December 31, 2014			
	Average Remaining Life (years)	Purchase Price	Accumulated Amortization	Net Carrying Amount
Customer relationships/lists	3-10	$ 89.4	$ (43.0)	$ 46.4
Know how	1-11	184.7	(102.5)	82.2
Developed product technology	5-12	103.9	(42.8)	61.1
Licenses	1-11	39.4	(26.5)	12.9
Tradenames	1-10	3.6	(2.1)	1.5
Covenants not to compete	3-8	4.9	(1.2)	3.7
Total definite-lived intangible assets		425.9	(218.1)	207.8
In-process research and development		46.4	—	46.4
Total purchased intangible assets		$ 472.3	$ (218.1)	$ 254.2

No material impairment losses related to purchased intangible assets were recorded in 2015. In 2014, we impaired licenses of a discontinued product line in the amount of $6.4 million. The impairment charge included $5.8 million in Cost of goods sold and $0.6 million in Research and development expense in the accompanying Consolidated Statements of Income.

Amortization expense related to purchased intangible assets for the years ended December 31, 2015, 2014 and 2013 was $36.5 million, $47.8 million and $45.0 million, respectively. Estimated future amortization expense (based on existing purchased intangible assets, not including IPR&D) for the years ending December 31, 2016, 2017, 2018, 2019, 2020 and thereafter is $33.3 million, $25.0 million, $22.1 million, $19.3 million, $17.3 million, and $53.9 million, respectively.

5. NOTES PAYABLE AND LONG-TERM DEBT

Under domestic and international lines of credit, standby letters of credit and guarantee arrangements, we had $201.2 million available for borrowing and usage as of December 31, 2015, which was reduced by $2.6 million that was utilized for standby letters of credit and guarantee arrangements issued by our banks to support our obligations.

The principal components of long-term debt are as follows (in millions):

	December 31, 2015	December 31, 2014
4.875% Senior Notes due 2020, net of discount	$ 423.7	$ 423.5
Capital leases and other debt	12.3	12.5
	436.0	436.0
Less current maturities	(0.3)	(0.3)
Long-term debt	$ 435.7	$ 435.7

Senior Notes due 2020

In December 2010, Bio-Rad sold $425.0 million principal amount of Senior Notes due 2020 (4.875% Notes). The sale yielded net cash proceeds of $422.6 million at an effective rate of 4.946%. The 4.875% Notes pay a fixed rate of interest of 4.875% per year. We have the option to redeem any or all of the 4.875% Notes at any time at a redemption price of 100% of the principal amount (plus a specified make-whole premium as defined in the indenture governing the 4.875% Notes) and accrued and unpaid interest thereon to the redemption date. Our

obligations under the 4.875% Notes are not secured and rank equal in right of payment with all of our existing and future unsubordinated indebtedness. Certain covenants apply at each year end to the 4.875% Notes including limitations on the following: liens, sale and leaseback transactions, mergers, consolidations or sales of assets and other covenants. We were in compliance with these covenants as of December 31, 2015. There are no restrictive covenants relating to total indebtedness, interest coverage, stock repurchases, recapitalizations, dividends and distributions to shareholders or current ratios.

Credit Agreement

In June 2014, Bio-Rad entered into a $200.0 million unsecured Credit Agreement, replacing the Amended and Restated Credit Agreement of June 2010, which expired on June 21, 2014. Borrowings under the Credit Agreement are on a revolving basis and can be used to make permitted acquisitions, for working capital and for other general corporate purposes. We had no outstanding borrowings under the Credit Agreement as of December 31, 2015 or 2014, however, $0.8 million was utilized for domestic standby letters of credit that reduced our borrowing availability. The Credit Agreement matures in June 2019. If we had borrowed against our Credit Agreement, the borrowing rate would have been 1.86% at December 31, 2015.

The Credit Agreement requires Bio-Rad to comply with certain financial ratios and covenants, among other things. These ratios and covenants include a leverage ratio test and an interest coverage test, as well as restrictions on our ability to declare or pay dividends, incur debt, guarantee debt, enter into transactions with affiliates, merge or consolidate, sell assets, make investments and create liens. We were in compliance with all of these ratios and covenants as of December 31, 2015.

Maturities of long-term debt at December 31, 2015 are as follows: 2016 - $0.3 million; 2017 - $0.3 million; 2018 - $0.3 million; 2019 - $0.2 million; 2020 - $425.3 million; thereafter - $10.9 million.

6. INCOME TAXES

The U.S. and international components of income before taxes are as follows (in millions):

	Year Ended December 31,		
	2015	2014	2013
U.S.	$ 48.4	$ 30.6	$ 5.7
International	97.4	101.0	106.7
Income before taxes	$ 145.8	$ 131.6	$ 112.4

The provision for income taxes consists of the following (in millions):

	Year Ended December 31,		
	2015	2014	2013
Current tax expense (benefit):			
U.S. Federal	$ 8.7	$ 9.6	$ (5.0)
State	1.7	3.8	0.6
International	34.1	35.6	38.3
Current tax expense	44.5	49.0	33.9
Deferred tax (benefit) expense:			
U.S. Federal	(0.2)	1.5	4.8
State	1.2	(0.2)	(0.1)
International	(7.1)	(7.3)	(9.4)
Deferred tax benefit	(6.1)	(6.0)	(4.7)
Non-current tax expense (benefit)	(5.6)	(0.3)	5.4
Provision for income taxes	$ 32.8	$ 42.7	$ 34.6

The reconciliation between our effective tax rate on income before taxes and the statutory tax rate is as follows:

	Year Ended December 31,		
	2015	2014	2013
U.S. statutory tax rate	35%	35%	35%
Impact of foreign operations	(4)	(4)	(6)
Research tax credits	(2)	(3)	(6)
Nontaxable subsidies	(1)	(2)	(2)
Tax settlements and changes to unrecognized tax benefits	(4)	(1)	5
Fines and penalties	—	3	1
Foreign dividends, net	(4)	—	1
Other	2	4	3
Provision for income taxes	22%	32%	31%

Our effective income tax rate was 22%, 32% and 31% in 2015, 2014 and 2013, respectively. The effective tax rate for 2015 included a significant tax benefit from expected utilization of foreign tax credits in the U.S. The effective tax rate for 2014 included nondeductible penalties and losses that were nonrecurring. The effective tax rate for 2013 included a significant tax benefit related to the reinstated 2012 U.S. federal research credit, partially offset by an increase in tax liabilities for unrecognized tax benefits and audit settlements in our foreign jurisdictions.

Our foreign taxes result primarily from income earned in France and Switzerland. Many jurisdictions in which we operate, including Switzerland, Russia, the U.K. and Singapore, have statutory tax rates that are significantly lower than the U.S. statutory tax rate of 35%. Our effective tax rate may be impacted in the future, either favorably or unfavorably, by many factors including, but not limited to, changes to statutory tax rates, changes in tax laws or regulations, tax audits and settlements, and generation of tax credits.

Deferred tax assets and liabilities reflect the tax effects of losses, credits, and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of deferred tax assets and liabilities are as follows (in millions):

	December 31,	
	2015	2014
Deferred tax assets:		
Bad debt, inventory and warranty accruals	$ 26.3	$ 25.3
Other post-employment benefits, vacation and other reserves	28.1	25.6
Tax credit and net operating loss carryforwards	80.2	60.5
Other	23.2	28.4
Total gross deferred tax assets	157.8	139.8
Valuation allowance	(58.3)	(58.6)
Total deferred tax assets	99.5	81.2
Deferred tax liabilities:		
Property and equipment	30.2	12.9
Investments and intangible assets	271.8	158.2
Total deferred tax liabilities	302.0	171.1
Net deferred tax liabilities	$ (202.5)	$ (89.9)

At December 31, 2015, Bio-Rad's international subsidiaries had combined net operating loss carryforwards of $116.2 million. Of these loss carryforwards, $115.7 million have no expiration date. We believe that it is more likely than not that the benefit from most of these net operating loss carryforwards will not be realized. We have provided a valuation allowance of $26.5 million relating to these net operating loss carryforwards.

At December 31, 2015, Bio-Rad had U.S. Federal net operating loss carryforwards of approximately $5.5 million as a result of acquisitions. These carryforwards are subject to limitation on their utilization and will expire between 2018 and 2034. At December 31, 2015, Bio-Rad had U.S. Federal foreign tax credit carryforwards of $13.1 million and U.S. Federal research tax credit carryforwards of $8.2 million, $1.9 million of which are subject to limitations on their utilization.

At December 31, 2015, Bio-Rad had approximately $53 million of California net operating loss carryforwards related to the acquisition of QuantaLife. We believe that it is more likely than not that the benefit from these net operating loss carryforwards will not be realized and have recorded a full valuation allowance against these losses. At December 31, 2015, Bio-Rad had a deferred tax asset of $22.8 million relating to California research tax credit carryforwards, including $2.0 million from the acquisition of QuantaLife, which may be carried forward indefinitely. Based on our judgment and consistent with prior years, we have recorded a full valuation allowance against the deferred tax asset.

We believe that it is more likely than not that certain of these deferred tax assets described above will not be realized in the foreseeable future. If or when recognized, the tax benefits relating to any reversal of the valuation allowance on deferred tax assets at December 31, 2015 will be recognized as a reduction of income tax expense.

Our income tax returns are audited by U.S. federal, state and foreign tax authorities. We are currently under examination by many of these tax authorities. The tax years open to examination include the years 2012 and forward for the U.S., and the years 2008 and forward for certain foreign jurisdictions, including France, Switzerland and Germany. There are differing interpretations of tax laws and regulations, and as a result, significant disputes may arise with these tax authorities involving issues of the timing and amount of deductions and allocations of income among various tax jurisdictions. We evaluate our exposures associated with our tax filing positions on a quarterly basis.

We record liabilities for unrecognized tax benefits related to uncertain tax positions. We do not believe any currently pending uncertain tax positions will have a material adverse effect on our consolidated financial statements, although an adverse resolution of one or more of these uncertain tax positions in any period may have a material impact on the results of operations for that period.

The following is a tabular reconciliation of the total amounts of unrecognized tax benefits (in millions):

	2015	2014	2013
Unrecognized tax benefits – January 1	$ 14.2	$ 16.2	$ 12.6
Additions to tax positions related to prior years	0.7	1.7	4.7
Reductions to tax positions related to prior years	(0.2)	(1.5)	(0.8)
Additions to tax positions related to the current year	1.5	1.6	2.0
Settlements	(0.5)	(0.4)	(0.3)
Lapse of statute of limitations	(6.3)	(2.6)	(1.7)
Currency translation	(0.5)	(0.8)	(0.3)
Unrecognized tax benefits – December 31	$ 8.9	$ 14.2	$ 16.2

Bio-Rad recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. Related to the unrecognized tax benefits noted above, Bio-Rad has accrued interest of $3.0 million, $3.8 million and $3.4 million as of December 31, 2015, 2014 and 2013, respectively.

As of December 31, 2015, based on the expected outcome of certain examinations or as a result of the expiration of statutes of limitation for certain jurisdictions, we believe that within the next twelve months it is reasonably possible that our previously unrecognized tax benefits could decrease by approximately $4.0 million. Substantially all such amounts will impact our effective income tax rate if recognized.

In general, it is our practice and intention to reinvest the earnings of our non-U.S. subsidiaries in their operations. As of December 31, 2015, Bio-Rad had not made a provision for U.S. or additional foreign withholding taxes on approximately $392 million of the excess of the amount for financial reporting over the tax basis of investments in foreign subsidiaries that are essentially permanent in duration. Generally, such amounts become subject to U.S. taxation upon remittance of dividends and under certain other circumstances. If these earnings were repatriated to the U.S., the deferred tax liability associated with these temporary differences would be approximately $82 million.

7. STOCKHOLDERS' EQUITY

Bio-Rad’s issued and outstanding stock consists of Class A Common Stock (Class A) and Class B Common Stock (Class B). Each share of Class A and Class B participates equally in the earnings of Bio-Rad, and is identical in all respects except as follows. Class A has limited voting rights. Each share of Class A is entitled to one tenth of a vote on most matters, and each share of Class B is entitled to one vote. Additionally, Class A stockholders are entitled to elect 25% of the Board of Directors and Class B stockholders are entitled to elect 75% of the directors. Cash dividends may be paid on Class A shares without paying a cash dividend on Class B shares but no cash dividend may be paid on Class B shares unless at least an equal cash dividend is paid on Class A shares. Class B shares are convertible at any time into Class A shares on a one-for-one basis at the option of the stockholder. The founders of Bio-Rad, the Schwartz family, collectively hold a majority of Bio-Rad’s voting stock. As a result, the Schwartz family is able to exercise significant influence over Bio-Rad.

Changes to Bio-Rad's issued common stock shares are as follows (in thousands):

	Class A Shares	Class B Shares
Balance at January 1, 2013	23,333	5,150
B to A conversions	80	(80)
Issuance of common stock	268	27
Balance at December 31, 2013	23,681	5,097
B to A conversions	5	(5)
Issuance of common stock	286	7
Balance at December 31, 2014	23,972	5,099
B to A conversions	18	(18)
Issuance of common stock	240	50
Balance at December 31, 2015	24,230	5,131

Treasury Shares

The Board of Directors has authorized the repurchase of up to $18.0 million of Bio-Rad's common stock, of which $3.3 million has yet to be repurchased in the open market as of December 31, 2015. The Amended and Restated Credit Agreement (Credit Agreement) limits our ability to repurchase our stock. In accordance with the terms of awards under the 2007 Incentive Award Plan, in June 2012, we withheld 122 shares of our Class A common stock and 917 shares of our Class B common stock to satisfy the minimum statutory tax obligations due upon the vesting of restricted stock of certain of our employees, which is considered a repurchase of our stock. All of the restricted stock vested as of December 31, 2013, and therefore we do not anticipate any repurchasing of shares for this purpose. We had no other repurchases of our stock during 2015 or 2014.

8. *ACCUMULATED OTHER COMPREHENSIVE INCOME*

Accumulated other comprehensive income included in our Consolidated Balance Sheets and Consolidated Statements of Changes in Stockholders' Equity consists of the following components (in millions):

	Foreign currency translation adjustments	Foreign other post-employment benefits adjustments	Net unrealized holding gains on available-for-sale investments	Total Accumulated other comprehensive income
Balances as of January 1, 2014	$ 189.4	$ (8.1)	$ 159.4	$ 340.7
Other comprehensive (loss) income, before reclassifications	(117.0)	(11.4)	7.3	(121.1)
Amounts reclassified from Accumulated other comprehensive income	(1.2)	0.7	—	(0.5)
Income tax effects	—	2.5	(2.7)	(0.2)
Other comprehensive (loss) income, net of income taxes	(118.2)	(8.2)	4.6	(121.8)
Balances as of December 31, 2014	$ 71.2	$ (16.3)	$ 164.0	$ 218.9
Other comprehensive (loss) income, before reclassifications	(37.5)	(6.8)	325.4	281.1
Amounts reclassified from Accumulated other comprehensive income	—	1.1	(0.9)	0.2
Income tax effects	—	1.3	(119.4)	(118.1)
Other comprehensive (loss) income, net of income taxes	(37.5)	(4.4)	205.1	163.2
Balances as of December 31, 2015	$ 33.7	$ (20.7)	$ 369.1	$ 382.1

The increase in 2015 for net unrealized holding gains on available-for-sale investments was primarily from our ownership in the preferred shares of Sartorius.

The amounts reclassified out of Accumulated other comprehensive income into the Consolidated Statements of Income, with presentation location, were as follows:

	Income before taxes impact (in millions): December 31,		
Components of Comprehensive income	2015	2014	Location
Liquidation of entity	$ —	$ 1.2	Cost of goods sold
Amortization of foreign other post-employment benefit items	$ (1.1)	$ (0.7)	Selling, general and administrative expense
Net holding gains on available for sale investments	$ 0.9	$ —	Other (income) expense, net

Reclassification adjustments are calculated using the specific identification method.

9. SHARE-BASED COMPENSATION/STOCK OPTION AND PURCHASE PLANS

Description of Share-Based Compensation Plans

Stock Option and Award Plans

We have three stock option plans for officers and certain other employees: the 1994 Stock Option Plan (1994 Plan); the 2003 Stock Option Plan (2003 Plan); and the 2007 Incentive Award Plan (2007 Plan). The 1994 Plan and 2003 Plan authorized the grant of incentive stock options and non-qualified stock options to employees. The 2007 Plan authorizes the grant of stock options, restricted stock, restricted stock units, stock appreciation rights and other types of equity awards to employees. We no longer grant stock option grants under the 1994 Plan or 2003 Plan. Since 2007, all share-based compensation grants have been from the 2007 Plan. A total of 2,250,360 shares have been reserved for issuance of equity awards under the 2007 Plan and may be of either Class A or Class B common stock as specified within the plan. At December 31, 2015, there were 770,094 shares available to be granted in the future.

Under the above plans, Class A and Class B options are granted at prices not less than fair market value of the underlying common stock on the date of grant. Generally, options granted have a term of 10 years and vest in increments of 20% per year over a five-year period on the yearly anniversary date of the grant. Stock awards issued under the 2007 Plan generally vest in increments of 20% per year over a five-year period on the yearly anniversary date of the grant.

Employee Stock Purchase Plans

Our 2011 Employee Stock Purchase Plan (2011 ESPP) provides that eligible employees may contribute up to 10% of their compensation up to $25,000 annually toward the quarterly purchase of our Class A common stock. The employees' purchase price is 85% of the lesser of the fair market value of the stock on the first business day or the last business day of each calendar quarter.

The 2011 ESPP includes two components: a Code Section 423 Component that we intend to qualify as an "employee stock purchase plan" under Section 423 of the U.S. Internal Revenue Code of 1986, as amended (the "Code") and a Non-423 Component, which authorizes the grant of purchase rights that does not qualify as an "employee stock purchase plan" under Section 423 of the Code. We have authorized the sale of 600,000 shares of Class A common stock under the 2011 ESPP.

Share-Based Compensation Expense

Included in our share-based compensation expense is the cost related to stock option grants, ESPP stock purchases, restricted stock and restricted stock unit awards. Share-based compensation expense is allocated to Cost of goods sold, Research and development expense, and Selling, general and administrative expense in the Consolidated Statements of Income.

For 2015, 2014 and 2013, we recognized share-based compensation expense of $17.0 million, $14.9 million and $13.7 million, respectively. We did not capitalize any share-based compensation expense in inventory.

For options and awards, we amortize the fair value on a straight-line basis. All stock compensation awards are amortized over the requisite service periods of the awards, which are generally the vesting periods.

Stock Options

The following table summarizes stock option activity:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Outstanding, January 1, 2013	747,293	$ 70.83		
Granted	55,050	$ 117.67		
Exercised	(159,450)	$ 54.16		
Forfeited/expired	(13,250)	$ 91.32		
Outstanding, December 31, 2013	629,643	$ 78.72		
Granted	54,000	$ 119.71		
Exercised	(91,387)	$ 63.66		
Forfeited/expired	(10,450)	$ 100.29		
Outstanding, December 31, 2014	581,806	$ 84.50		
Granted	40,500	$ 139.56		
Exercised	(195,221)	$ 61.29		
Forfeited/expired	(380)	$ 62.47		
Outstanding, December 31, 2015	426,705	$ 100.36	5.46	$ 16.4
Vested and expected to vest, December 31, 2015	417,883	$ 99.75	5.41	$ 16.3
Exercisable, December 31, 2015	282,895	$ 89.43	4.23	$ 13.9

Intrinsic value for stock options is defined as the difference between the current market value and the exercise price. The total intrinsic value on the date of exercise of stock options exercised during 2015, 2014 and 2013 was approximately $13 million, $5 million and $11 million, respectively. The total grant date fair value of options vested during 2015, 2014 and 2013 was $2.2 million, $2.1 million and $2.2 million, respectively.

Cash received from stock options exercised during 2015, 2014 and 2013 was $2.9 million, $5.8 million and $4.1 million, respectively. The actual tax benefit realized for the tax deductions from stock options exercised totaled $9.3 million, $5.3 million and $6.6 million in 2015, 2014 and 2013, respectively.

As of December 31, 2015, there was $5.5 million of total unrecognized compensation cost from stock options. This amount is expected to be recognized in the future over a weighted-average period of approximately 3 years.

The weighted-average fair value of stock options granted was estimated using a Black-Scholes option-pricing model with the following weighted-average assumptions:

	Year Ended December 31,		
	2015	2014	2013
Expected volatility	23%	25%	28%
Risk-free interest rate	1.90%	2.35%	2.65%
Expected life (in years)	7.7	8.7	8.9
Expected dividend	—	—	—
Weighted-average fair value of options granted	$ 42.74	$ 43.96	$ 47.25

Volatility is based on the historical volatilities of our common stock for a period equal to the stock option's expected life. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of the grant. The expected life represents the number of years that we estimate, based primarily on historical experience, that the options will be outstanding prior to exercise. We do not anticipate paying any cash dividends in the future and therefore use an expected dividend yield of zero.

Restricted Stock and Restricted Stock Units

Under the 2007 Plan, restricted stock was last granted in 2008. Restricted stock units, which are rights to receive shares of company stock, were granted from 2007 through 2015 under the 2007 Plan. The fair value of each restricted stock share and restricted stock unit is the market value as determined by the closing price of the stock on the day of grant.

The following table summarizes restricted stock and restricted stock unit activity:

	Restricted Stock & Restricted Stock Units	Weighted-Average Grant-Date Fair Value	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Outstanding, January 1, 2013	361,458	$ 96.15		
Granted	144,445	$ 117.09		
Vested	(104,883)	$ 91.76		
Forfeited	(25,590)	$ 95.97		
Outstanding, December 31, 2013	375,430	$ 105.44		
Granted	145,695	$ 119.56		
Vested	(107,557)	$ 98.52		
Forfeited	(36,203)	$ 108.17		
Outstanding, December 31, 2014	377,365	$ 112.60		
Granted	177,110	$ 139.56		
Vested	(113,347)	$ 107.62		
Forfeited	(28,706)	$ 116.19		
Outstanding, December 31, 2015	412,422	$ 125.30	2.16	$ 57.2

The total grant date fair value of restricted stock and restricted stock units in 2015, 2014 and 2013 was $12.2 million, $10.6 million and $9.6 million, respectively. As of December 31, 2015, there was approximately $40.1 million of total unrecognized compensation cost related to restricted stock units. This amount is expected to be recognized over a remaining weighted-average period of approximately 4 years.

Employee Stock Purchase Plans

The fair value of the employees' purchase rights under the 2011 ESPP and the 1988 ESPP was estimated using a Black-Scholes model with the following weighted-average assumptions:

	Year Ended December 31,		
	2015	2014	2013
Expected volatility	18%	15%	19%
Risk-free interest rate	0.02%	0.04%	0.05%
Expected life (in years)	0.25	0.25	0.25
Expected dividend	—	—	—
Weighted-average fair value of purchase rights	$25.08	$21.88	$21.76

The major assumptions are primarily based on historical data. Volatility is based on the historical volatilities of our common stock for a period equal to the expected life of the purchase rights. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of the grant. We do not anticipate paying any cash dividends in the future and therefore use an expected dividend yield of zero.

We sold 96,634 shares for $10.8 million, 102,222 shares for $10.2 million and 103,669 shares for $10.0 million under the 2011 ESPP to employees in 2015, 2014 and 2013, respectively. At December 31, 2015, 189,726 shares remain authorized and available for issuance under the 2011 ESPP.

We currently issue new shares to satisfy stock option exercises, restricted stock issuances and ESPP stock purchases.

10. OTHER INCOME AND EXPENSE, NET

Other (income) expense, net includes the following components (in millions):

	Year Ended December 31,		
	2015	2014	2013
Interest and investment income	$ (10.1)	$ (13.5)	$ (13.4)
Net realized (gains) losses on investments	(1.6)	—	0.3
Other-than-temporary impairment losses on investments	0.6	0.4	0.3
Miscellaneous other (income) expense items, net	—	0.1	—
Other (income) expense, net	$ (11.1)	$ (13.0)	$ (12.8)

Other-than-temporary impairment losses on investments were recorded in 2015, 2014 and 2013 on certain of our available-for-sale investments and a certain equity investment in light of the continuing declines in their market prices at that time.

11. SUPPLEMENTAL CASH FLOW INFORMATION

The reconciliation of net income including noncontrolling interests to net cash provided by operating activities is as follows (in millions):

	Year Ended December 31,		
	2015	2014	2013
Net income including noncontrolling interests	$ 113.1	$ 88.8	$ 77.8
Adjustments to reconcile net income including noncontrolling interests to net cash provided by operating activities (net of effects of acquisitions):			
Depreciation and amortization	131.8	149.9	147.2
Share-based compensation	17.0	14.9	13.7
(Gains) losses on dispositions of securities	(1.0)	0.3	0.6
Losses on dispositions of fixed assets	0.3	0.4	0.5
Excess tax benefits from share-based compensation	(3.6)	(1.3)	(2.7)
Changes in fair value of contingent consideration	(5.6)	(1.4)	(5.8)
(Increase) decrease in accounts receivable, net	(39.0)	11.1	(24.2)
(Increase) decrease in inventories, net	(54.2)	5.8	(39.7)
Decrease (increase) in other current assets	0.1	(5.7)	(4.2)
Increase (decrease) in accounts payable and other current liabilities	28.6	(9.9)	33.2
Increase (decrease) in income taxes payable	12.7	20.4	(38.0)
Decrease in deferred income taxes	(6.4)	(6.3)	(4.0)
Net decrease/increase in other long-term liabilities/assets	(7.6)	6.3	14.7
Net cash provided by operating activities	$ 186.2	$ 273.3	$ 169.1
Non-cash investing activities:			
Purchased intangible assets	$ —	$ 0.2	$ 12.0
Purchased marketable securities and investments	$ 2.2	$ —	$ 0.4

12. COMMITMENTS AND CONTINGENT LIABILITIES

Rents and Leases

Rental expense under operating leases was $45.0 million, $46.9 million and $45.5 million in 2015, 2014 and 2013, respectively. Leases are principally for facilities and automobiles. We had no sublease income.

Annual future minimum lease payments at December 31, 2015 under operating leases are as follows: 2016 - $41.2 million; 2017 - $33.9 million; 2018 - $25.2 million; 2019 - $18.7 million; and 2020 and beyond - $43.3 million.

Deferred Profit Sharing Retirement Plan

We have a profit sharing plan covering substantially all U.S. employees. Contributions are made at the discretion of the Board of Directors. Bio-Rad has no liability other than for the current year's contribution. Contribution expense was $14.7 million, $13.7 million and $13.5 million in 2015, 2014 and 2013, respectively.

Other Post-Employment Benefits

In several foreign locations we are statutorily required to provide a lump sum severance or termination indemnity to our employees. Under these plans, the vested benefit obligation at December 31, 2015 and 2014 was $68.6 million and $46.1 million, respectively, and has been included in Accrued payroll and employee benefits and Other long-term liabilities in the Consolidated Balance Sheets. Most plans are not required to be funded, and as such, there is no trust or other device used to accumulate assets to settle these obligations. However, some of these plans require funding based on local laws in which there is a trust or other device used to accumulate assets to assist in settling these obligations.

Purchase Obligations

As of December 31, 2015, we had obligations that have been recognized on our balance sheet of $110.8 million, which include agreements to purchase goods or services that are enforceable and legally binding to Bio-Rad and that specify all significant terms and exclude agreements that are cancelable without penalty.

The annual future fixed and determinable portion of our purchase obligations that have been recognized on our balance sheet as of December 31, 2015 are as follows: 2016 - $23.8 million, 2017 - $10.9 million, 2018 - $3.2 million, 2019 - $2.1 million, 2020 - $1.7 million and after 2020 - $69.1 million.

As of December 31, 2015, we had purchase obligations that have not been recognized on our balance sheet of $35.7 million, which include agreements to purchase goods or services that are enforceable and legally binding to Bio-Rad and that specify all significant terms and exclude agreements that are cancelable without penalty.

The annual future fixed and determinable portion of our purchase obligations that have not been recognized on our balance sheet as of December 31, 2015 are as follows: 2016 - $17.8 million, 2017 - $5.1 million, 2018 - $3.6 million, 2019 - $3.6 million, 2020 - $5.6 million and after 2020 - $0 million.

Letters of Credit

In the ordinary course of business, we are at times required to post letters of credit. The letters of credit are issued by our banks to guarantee our obligations to various parties. We were contingently liable for $1.3 million of standby letters of credit with banks as of December 31, 2015.

Contingent Consideration

During the second quarter of 2014, we recognized a contingent consideration liability upon our acquisition of GnuBIO. At the acquisition date, the contingent consideration was based on a probability-weighted income approach that could reach $70.0 million upon the achievement of all development/regulatory and sales milestones. The contingent consideration for the development/regulatory milestones was valued at $10.7 million at the acquisition date based on assumptions regarding the probability of achieving the milestones, with such amounts discounted to present value. The contingent consideration related to the development/regulatory milestones was revalued to a fair value of $10.0 million as of December 31, 2015 and 2014. The contingent consideration for the sales milestones at the acquisition date and at December 31, 2015 was determined to be negligible, using the risk-neutral probability of being in the money based on a Black-Scholes framework. The sales that are required under the purchase agreement have a low probability of obtaining the thresholds.

During the third quarter of 2012, we recognized a contingent consideration liability of $44.6 million upon our acquisition of a new cell sorting system from Propel Labs, Inc. The fair value of the contingent consideration was based on a probability-weighted income approach related to the achievement of certain development and sales milestones. The development milestone was achieved and paid in 2013. The first sales milestone was reached, resulting in payments of $2.4 million and $3.0 million in the fourth quarter of 2014 and the first quarter of 2015, respectively. During 2015, the contingent consideration was revalued by a decrease of $5.6 million to its estimated fair value of $9.1 million as of December 31, 2015.

Concentrations of Labor Subject to Collective Bargaining Agreements

At December 31, 2015, approximately eight percent of Bio-Rad's approximately 3,100 U.S. employees were covered by a collective bargaining agreement, which will expire on November 8, 2016. Many of Bio-Rad's non-U.S. full-time employees, especially in France, are covered by collective bargaining agreements.

13. LEGAL PROCEEDINGS

On January 23, 2015, the City of Riviera Beach General Employees' Retirement System filed a shareholder derivative lawsuit in the Superior Court of California, Contra Costa County, against three of our current directors and one former director. We are also named as a nominal defendant. In the complaint, the plaintiff alleges that our directors breached their fiduciary duty of loyalty by failing to ensure that we had sufficient internal controls and systems for compliance with the Foreign Corrupt Practices Act ("FCPA"); that we failed to provide adequate training on the FCPA; and that based on these actions, the directors have been unjustly enriched. Purportedly seeking relief on our behalf, the plaintiff seeks an award of restitution and unspecified damages, costs and expenses (including attorneys' fees). On April 23, 2015, we and the individual defendants filed a demurrer requesting dismissal of the complaint in this case. The demurrer was heard on August 6, 2015, and the Court granted the demurrer for failure to make a demand on our Board of Directors on August 17, 2015, but provided leave to amend. On September 4, 2015, the plaintiff filed an amended complaint and simultaneously served a litigation demand letter on our Board of Directors via its counsel in this action. The letter demands that we investigate and bring appropriate legal action against certain individuals, including the defendants in the City of Riviera Beach case and six current and former employees. The plaintiff also moved for a temporary stay in the proceedings, purportedly to enable the Board to respond to the demand. The Board has formed a Demand Review Committee to respond to the demand. On February 24, 2016, the Demand Review Committee reported to the Board that it had concluded its investigation and unanimously determined that it is not in the best interests of the Company and its stockholders to pursue litigation against any individuals named in the City of Riviera Beach's litigation demand letter. On October 6, 2015, we and the individual defendants filed a second demurrer, seeking to dismiss the case for failure to make a timely pre-suit demand. The case has been stayed pending mediation. The caption is City of Riviera Beach General Employees' Retirement System v. Schwartz et al., Case No. C-15-00140.

On August 13, 2015 and August 18, 2015, respectively, each of International Brotherhood of Electrical Workers Local 38 Pension Fund and Wayne County Employees' Retirement System filed a stockholder derivative complaint in the Delaware Court of Chancery against four of our current directors and one former director. We are named as a nominal defendant in the complaints. The complaints allege that the defendants failed to cause us to develop internal controls sufficient to ensure our compliance with the FCPA. The plaintiffs assert claims for breach of fiduciary duty and unjust enrichment and request an award of the damages we sustained as a result of the alleged violations, among other relief. The two lawsuits were consolidated on August 27, 2015. The case has been stayed pending mediation. The caption of the consolidated case is In re Bio-Rad Laboratories, Inc. Stockholder Litigation, Consol. C.A. No. 11387-VCN (Del. Ch.).

On May 27, 2015, our former general counsel, Sanford S. Wadler, filed a lawsuit in the U.S. District Court, Northern District of California, against us and four of our current directors and one former director. The plaintiff's suit alleges whistleblower retaliation in violation of the Sarbanes-Oxley Act and the Dodd-Frank Act for raising FCPA-related concerns. Mr. Wadler also alleges wrongful termination in violation of public policy, non-payment of wages and waiting time penalties in violation of the California Labor Code. The plaintiff seeks back pay, compensatory damages for lost wages, earnings, retirement benefits and other employee benefits, compensation for mental pain and anguish and emotional distress, waiting time penalties, punitive damages, litigation costs (including attorneys' fees) and reinstatement of employment. We believe this lawsuit is without merit, and on July 28, 2015 we filed a motion to dismiss the plaintiff's complaint and specifically requested dismissal of the claims alleged against us under the Dodd-Frank Act and California Labor Code 1102.5 and the claims against the directors under the Sarbanes-Oxley Act and the Dodd-Frank Act. On October 23, 2015, the District Court granted our motion with respect to the alleged violations of the Sarbanes-Oxley Act against all the director defendants except Norman Schwartz with prejudice. The Court denied our motion to dismiss the claims under the Dodd-Frank Act as against both us and the director defendants. Discovery has started. A mediation is scheduled for April 19, 2016 and trial is scheduled for January 9, 2017.

We are vigorously defending against the claims above. We cannot at this time reasonably estimate a range of exposure, if any, of the potential liability. In addition, we are party to various other claims, legal actions and complaints arising in the ordinary course of business. We do not believe, at this time, that any ultimate liability resulting from any of these other matters will have a material adverse effect on our results of operations, financial position or liquidity. However, we cannot give any assurance regarding the ultimate outcome of these other matters and their resolution could be material to our operating results for any particular period, depending on the level of income for the period.

14. SEGMENT INFORMATION

Bio-Rad is a multinational manufacturer and worldwide distributor of its own life science research products and clinical diagnostics products. We have two reportable segments: Life Science and Clinical Diagnostics. These reportable segments are strategic business lines that offer more than 8,000 different products and services and require different marketing strategies. We do not disclose quantitative information about our different products and services as it is impractical to do so based primarily on the numerous products and services that we sell and the global markets that we serve.

The Life Science segment develops, manufactures, sells and services reagents, apparatus and instruments used for biological research. These products are sold to university and medical school laboratories, pharmaceutical and biotechnology companies, food testing laboratories and government and industrial research facilities.

The Clinical Diagnostics segment develops, manufactures, sells and services automated test systems, informatics systems, test kits and specialized quality controls for the healthcare market. These products are sold to reference laboratories, hospital laboratories, state newborn screening facilities, physicians' office laboratories, transfusion laboratories and insurance and forensic testing laboratories.

Other Operations include the remainder of our former Analytical Instruments segment.

Segment results are presented in the same manner as we present our operations internally to make operating decisions and assess performance. The accounting policies of the segments are the same as those described in Significant Accounting Policies (see Note 1). Segment profit or loss includes an allocation of corporate expense based upon sales and an allocation of interest expense based upon accounts receivable and inventories. The difference between total segment allocated interest expense, depreciation and amortization, and capital expenditures and the corresponding consolidated amounts is attributable to our corporate headquarters. Segments are expected to manage only assets completely under their control. Accordingly, segment assets include primarily accounts receivable, inventories and gross machinery and equipment. Goodwill balances have been included in corporate for segment reporting purposes.

Information regarding industry segments at December 31, 2015, 2014, and 2013 and for the years then ended is as follows (in millions):

		Life Science	Clinical Diagnostics	Other Operations
Segment net sales	2015	$ 695.0	$ 1,310.4	$ 14.0
	2014	728.3	1,432.3	14.4
	2013	710.0	1,408.0	14.7
Allocated interest expense	2015	$ 6.1	$ 15.4	$ 0.1
	2014	5.5	15.9	0.1
	2013	10.4	30.1	0.1
Depreciation and amortization	2015	$ 30.7	$ 77.8	$ 0.1
	2014	33.2	95.8	—
	2013	32.6	91.5	0.1
Segment (loss) profit	2015	$ (0.7)	$ 152.4	$ 0.7
	2014	(14.7)	167.1	1.2
	2013	(13.7)	176.2	1.1
Segment assets	2015	$ 390.5	$ 878.3	$ 4.4
	2014	361.5	884.9	4.8
Capital expenditures	2015	$ 8.2	$ 51.3	$ 0.1
	2014	14.1	60.1	—

Net corporate operating expense consists of receipts and expenditures that are not the primary responsibility of segment operating management and therefore are not allocated to the segments for performance assessment by our chief operating decision maker. In 2014 and 2013, this included the accrual of $20.1 million and $35.0 million, respectively, associated with the U.S. Securities and Exchange Commission and Department of Justice investigations relating to the U.S. Foreign Corrupt Practices Act, for which a final settlement was reached in the fourth quarter of 2014. In 2013, this also included the $15.6 million expense for the redemption of our 8.0% Senior Subordinated Notes. The following reconciles total segment profit to consolidated income before taxes (in millions):

	Year Ended December 31,		
	2015	2014	2013
Total segment profit	$ 152.4	$ 153.6	$ 163.6
Foreign exchange losses	(10.2)	(9.3)	(8.6)
Net corporate operating, interest and other expense, net not allocated to segments	(7.5)	(25.7)	(55.4)
Other income (expense), net	11.1	13.0	12.8
Consolidated income before taxes	$ 145.8	$ 131.6	$ 112.4

The following reconciles total segment assets to consolidated total assets (in millions):

	December 31,	
	2015	2014
Total segment assets	$ 1,273.2	$ 1,251.2
Cash and other current assets	926.9	888.1
Property, plant and equipment, net, excluding segment specific gross machinery and equipment	46.1	26.7
Goodwill, net	495.9	500.4
Other long-term assets	969.4	674.9
Total assets	$ 3,711.5	$ 3,341.3

The following presents net sales to external customers by geographic region based primarily on the location of the use of the product or service (in millions):

	Year Ended December 31,		
	2015	2014	2013
Europe	$ 763.7	$ 901.7	$ 886.1
Pacific Rim	392.2	417.5	413.3
United States	735.0	704.9	677.7
Other (primarily Canada and Latin America)	128.5	150.9	155.6
Total net sales	$ 2,019.4	$ 2,175.0	$ 2,132.7

The following presents Property, plant and equipment, net, Other investments and other assets, excluding deferred income taxes, by geographic region based upon the location of the asset (in millions):

	December 31,	
	2015	2014
Europe	$ 204.4	$ 194.5
Pacific Rim	15.1	19.0
United States	964.4	623.8
Other (primarily Canada and Latin America)	9.1	12.1
Total Property, plant and equipment, net, Other investments and other assets, excluding deferred income taxes	$ 1,193.0	$ 849.4

15. QUARTERLY FINANCIAL DATA (UNAUDITED)

Summarized quarterly financial data for 2015 and 2014 are as follows (in millions, except per share data):

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2015				
Net sales	$ 472.8	$ 506.1	$ 470.0	$ 570.6
Gross profit	270.1	279.6	263.5	308.5
Net income attributable to Bio-Rad	17.8	28.4	17.4	49.5
Basic earnings per share	$ 0.61	$ 0.98	$ 0.59	$ 1.69
Diluted earnings per share	$ 0.61	$ 0.97	$ 0.59	$ 1.68
2014				
Net sales	$ 509.3	$ 536.8	$ 530.6	$ 598.2
Gross profit	275.3	297.2	288.6	317.4
Net income attributable to Bio-Rad	6.7	31.6	11.5	39.0
Basic earnings per share	$ 0.23	$ 1.10	$ 0.40	$ 1.35
Diluted earnings per share	$ 0.23	$ 1.09	$ 0.39	$ 1.34

16. SUBSEQUENT EVENT

In January 2016, we acquired a high performance analytical flow cytometer platform from Propel Labs (Propel) that will enable advanced and novice users to perform basic and multi-parameter cytometry for a wide range of applications and chemistries. Bio-Rad expects to launch the instrument later this year.

The aggregate consideration for the instrument consisted of a cash payment in January 2016 of $10.0 million, with payments of up to $20.0 million due upon the completion of certain technical milestones. Following the completion of these milestones, semi-annual performance payments to Propel will be required based on a percentage of sales through 2020.

We are presently unable to report the purchase price allocation or the evaluation of the transaction, as more time is needed to complete the information transfer from the seller and include all information into a valuation of individual assets and liabilities, including contingent consideration.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended ("Exchange Act"), that are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Subject to the limitations noted above, our management, with the participation of our CEO and CFO, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the year covered by this Annual Report on Form 10-K. Based on that evaluation, the CEO and CFO have concluded that, as of such date, our disclosure controls and procedures were effective to meet the objective for which they were designed and operate at the reasonable assurance level.

(b) Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company as defined in Rule 13a-15(f) or 15d-15(f) of the Exchange Act. 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, and includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our 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.

Our management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2015 using the criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this assessment and those criteria, management concluded that our internal control over financial reporting was effective as of December 31, 2015. Our internal control over financial reporting has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report, which appears in Part II, Item 8 of this Form 10-K.

ITEM 9B. OTHER INFORMATION

None.

PART III.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Part of the information required to be furnished pursuant to this item is incorporated by reference from portions of Bio-Rad's definitive proxy statement to be mailed to stockholders in connection with our 2016 annual meeting of stockholders (the "2016 Proxy Statement") under "Election of Directors," "Committees of the Board of Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance."

Bio-Rad's Board of Directors has determined that Mr. Louis Drapeau is an "audit committee financial expert," as defined in Item 407(d)(5) of Regulation S-K. Mr. Drapeau is also an "independent" director, as determined in accordance with the independence standards set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, and Section 303A.02 of the New York Stock Exchange (NYSE) Listed Company Manual.

We have adopted a code of business ethics and conduct that applies to our principal executive officer, principal financial officer, controller and all other employees and is available through the Corporate Governance section of our website (www.bio-rad.com). We will also provide a copy of the code of ethics to any person, without charge, upon request, by writing to us at "Bio-Rad Laboratories, Inc., Investor Relations, 1000 Alfred Nobel Drive, Hercules, CA 94547." We intend to satisfy any disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of the code of ethics by posting such information on the Corporate Governance section of our website (www.bio-rad.com).

ITEM 11. EXECUTIVE COMPENSATION

The information required to be furnished pursuant to this item is incorporated by reference from portions of the 2016 Proxy Statement under "Compensation Discussion and Analysis," "Summary Compensation Table," "Grants of Plan-Based Awards," "Outstanding Equity Awards at Fiscal Year-End," "Option Exercises and Stock Vested Table," "Pension Benefits," "Nonqualified Defined Contribution and Other Nonqualified Deferred Compensation Plans," "Potential Payments on Termination or Change in Control," "Director Compensation" and "Compensation Committee Interlocks and Insider Participation." In addition, the information from a portion of the 2016 Proxy Statement under "Compensation Committee Report" is incorporated herein by reference and furnished on this Form 10-K and shall not be deemed "filed" for purposes of Section 18 of the Securities and Exchange Act of 1934, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Part of the information required to be furnished pursuant to this item is incorporated by reference from a portion of the 2016 Proxy Statement under "Principal and Management Stockholders."

Equity Compensation Plan Information as of December 31, 2015

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)(3)	(c)
Equity compensation plans approved by security holders (1)	839,127	$ 100.36	959,820 (2)
Equity compensation plans not approved by security holders	—	—	—
Total	839,127	$ 100.36	959,820

(1) Consists of the 2003 Stock Option Plan of Bio-Rad Laboratories, Inc., the Bio-Rad Laboratories, Inc. 2007 Incentive Award Plan, and the Bio-Rad Laboratories, Inc. 2011 Employee Stock Purchase Plan.
(2) Consists of 770,094 shares available under the Bio-Rad Laboratories, Inc. 2007 Incentive Award Plan and 189,726 shares available under the Bio-Rad Laboratories, Inc. 2011 Employee Stock Purchase Plan.
(3) Excludes Restricted Stock Units.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required to be furnished pursuant to this item is incorporated by reference from portions of the 2016 Proxy Statement under "Transactions with Related Persons" and "Committees of the Board of Directors."

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required to be furnished by this item is incorporated by reference from a portion of the 2016 Proxy Statement under "Report of the Audit Committee of the Board of Directors."

PART IV.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)1 Index to Financial Statements – See Item 8 of Part II of this report “Financial Statements and Supplementary Data" on page 38 for a list of financial statements.

2 Schedule II Valuation and Qualifying Accounts

All other financial statement schedules are omitted because they are not required or the required information is included in the consolidated financial statements or the notes thereto.

3 Index to Exhibits

The exhibits listed in the accompanying Index to Exhibits on pages 85 through 87 of this report are filed or incorporated by reference as part of this report.

BIO-RAD LABORATORIES, INC.
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
Years Ended December 31, 2015, 2014, and 2013
(in thousands)

Allowance for doubtful accounts receivable

	Balance at Beginning of Year	Additions Charged to Costs and Expenses	Deductions	Balance at End of Year
2015	$ 27,973	$ 8,783	$ (12,338)	$ 24,418
2014	$ 32,471	$ 7,164	$ (11,662)	$ 27,973
2013	$ 29,202	$ 9,181	$ (5,912)	$ 32,471

Valuation allowance for current and long-term deferred tax assets

	Balance at Beginning of Year	Additions Charged (Credited) to Income Tax Expense	Deductions	Balance at End of Year
2015	$ 58,615	$ (338)	$ —	$ 58,277
2014	$ 64,011	$ (5,396)	$ —	$ 58,615
2013	$ 52,856	$ 11,155	$ —	$ 64,011

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BIO-RAD LABORATORIES, INC.

By: /s/ Christine A. Tsingos
Christine A. Tsingos
Executive Vice President, Chief Financial Officer

Date: February 29, 2016

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Principal Executive Officer:		
/s/ Norman Schwartz	Chairman of the Board, President and Chief Executive Officer	February 29, 2016
(Norman Schwartz)		
Principal Financial Officer:		
/s/ Christine A. Tsingos	Executive Vice President,	
(Christine A. Tsingos)	Chief Financial Officer	February 29, 2016
Principal Accounting Officer:		
/s/ James R. Stark	Vice President, Corporate Controller	February 29, 2016
(James R. Stark)		
Other Directors:		
/s/ Louis Drapeau	Director	February 29, 2016
(Louis Drapeau)		
/s/ Robert M. Malchione	Director	February 29, 2016
(Robert M. Malchione)		
/s/ Joel McComb	Director	February 29, 2016
(Joel McComb)		
/s/ Deborah J. Neff	Director	February 29, 2016
(Deborah J. Neff)		
/s/ Alice N. Schwartz	Director	February 29, 2016
(Alice N. Schwartz)		

BIO-RAD LABORATORIES, INC.
INDEX TO EXHIBITS ITEM 15(a)3

Exhibits 32.1 and 32.2 are furnished herewith and should not be deemed to be "filed under the Securities Exchange Act of 1934."

Exhibit No.	
3.1	Restated Certificate of Incorporation of Bio-Rad Laboratories, Inc. (1)
3.1.1	Certificate of Amendment to Restated Certificate of Incorporation of Bio-Rad Laboratories, Inc. (1)
3.2	Amended and Restated Bylaws of Bio-Rad Laboratories, Inc. (2)
4.1	Indenture dated as of December 9, 2010 for 4.875% Senior Notes due 2020 among Bio-Rad Laboratories, Inc., as Issuer, and Wilmington Trust FSB, as Trustee. (3)
10.1	Credit Agreement, dated as of June 20, 2014, by and among Bio-Rad Laboratories, Inc., the lenders referred to therein, JPMorgan Chase Bank, N.A., as administrative agent, Union Bank of California, N.A. and Wells Fargo Bank, N.A. as co-syndication agents, and Bank of America, N.A. and HSBC Bank USA, National Association, as co-documentation agents. (4)
10.2	1994 Stock Option Plan. (5)
10.2.1	Amendment to the Bio-Rad Laboratories, Inc. 1994 Stock Option Plan dated April 28, 1998. (6)
10.2.2	Second Amendment to the Bio-Rad Laboratories, Inc. 1994 Stock Option Plan dated December 6, 1999. (6)
10.2.3	Third Amendment to the Bio-Rad Laboratories, Inc. 1994 Stock Option Plan dated September 19, 2000. (6)
10.2.4	Fourth Amendment to the Bio-Rad Laboratories, Inc. 1994 Stock Option Plan dated April 25, 2001. (6)
10.2.5	Amendment to the 1994 Stock Option Plan of Bio-Rad Laboratories, Inc., dated February 18, 2009. (7)
10.2.6	Amendment to the 1994 Stock Option Plan of Bio-Rad Laboratories, Inc., dated December 12, 2011. (8)
10.3	Bio-Rad Laboratories, Inc. 2011 Employee Stock Purchase Plan. (9)
10.4	Employees' Deferred Profit Sharing Retirement Plan (Amended and Restated effective January 1, 1997). (10)
10.5	2003 Stock Option Plan. (11)
10.5.1	Amendment to the 2003 Stock Option Plan of Bio-Rad Laboratories, Inc. (12)
10.5.2	Second Amendment to the 2003 Stock Option Plan of Bio-Rad Laboratories, Inc., dated March 1, 2012. (13)

Exhibit No.	
10.6	2007 Incentive Award Plan. (14)
10.6.1	Restricted Stock Unit Award Grant Notice and Restricted Stock Unit Award Agreement under the 2007 Incentive Award Plan. (15)
10.6.2	Amendment to the Bio-Rad Laboratories, Inc. 2007 Incentive Award Plan. (16)
10.7	Form of Indemnification Agreement. (17)
10.8	Settlement Agreement and General Release. (18)
10.9	Non-Prosecution Agreement effective November 3, 2014 between the U.S. Department of Justice and Bio-Rad Laboratories, Inc. (19)
10.10	Securities and Exchange Commission Order effective November 3, 2014. (19)
21.1	Listing of Subsidiaries.
23.1	Consent of Independent Registered Public Accounting Firm.
31.1	Certification of Chief Executive Officer Required by Rule 13a-14(a) (17CFR 240.13a-14(a)).
31.2	Certification of Chief Financial Officer Required by Rule 13a-14(a) (17CFR 240.13a-14(a)).
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	Pursuant to Rule 405 of Regulation S-T, the following financial information from the Company's Annual Report on Form 10-K for the year ended December 31, 2015, is filed in XBRL (Extensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Changes in Stockholders' Equity, (vi) the Notes to Consolidated Financial Statements and (vii) Schedule II - Valuation and Qualifying Accounts.

(1) Incorporated by reference to the Exhibits to Bio-Rad’s Form 10-K filing for the fiscal year ended December 31, 2010.

(2) Incorporated by reference to the Exhibit to Bio-Rad’s Form 8-K filing, dated March 31, 2014.

(3) Incorporated by reference to Exhibit 4.1 to Bio-Rad’s Form 8-K filing, dated December 9, 2010.

(4) Incorporated by reference to the Exhibits to Bio-Rad’s 8-K filing, dated June 26, 2014.

(5) Incorporated by reference to Exhibit 4.1 to Bio-Rad’s Form S-8 filing, dated April 29, 1994.

(6) Incorporated by reference to the Exhibits to Bio-Rad's Form 10-K filing for the fiscal year ended December 31, 2003, dated March 15, 2004.

(7) Incorporated by reference to Exhibit 10.4.5 to Bio-Rad's June 30, 2009 Form 10-Q filing, dated August 5, 2009.

(8) Incorporated by reference to Exhibit 10.4.6 to Bio-Rad's Form 10-K filing for the fiscal year ended December 31, 2011, dated February 29, 2012.

(9) Incorporated by reference to Exhibit 10.9 to Bio-Rad's June 30, 2011 Form 10-Q filing, dated August 4, 2011.

(10) Incorporated by reference to Exhibit 10.6 to Bio-Rad's September 30, 1997 Form 10-Q filing, dated November 13, 1997.

(11) Incorporated by reference to Exhibit 10.7 to Bio-Rad's March 31, 2003 Form 10-Q filing, dated May 13, 2003.

(12) Incorporated by reference to Exhibit 10.7.1 to Bio-Rad's March 31, 2007 Form 10-Q filing, dated May 4, 2007.

(13) Incorporated by reference to Exhibit 10.1 to Bio-Rad's June 30, 2012 Form 10-Q filing, dated August 9, 2012.

(14) Incorporated by reference to Exhibit 4.1 to Bio-Rad's Form S-8 filing, dated July 30, 2007.

(15) Incorporated by reference to Exhibit 10.8.1 to Bio-Rad's September 30, 2009 Form 10-Q filing, dated November 4, 2009.

(16) Incorporated by reference to Exhibit 10.1 to Bio-Rad's March 31, 2014 Form 10-Q filing, dated May 8, 2014.

(17) Incorporated by reference to Exhibit 10.1 to Bio-Rad's Form 8-K filing, dated June 28, 2011.

(18) Incorporated by reference to Exhibit 10.1 to Bio-Rad's Form 10-Q filing, dated November 7, 2014.

(19) Incorporated by reference to the Exhibits to Bio-Rad's Form 10-K filing for the fiscal year ended December 31, 2014.

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DIRECTORS

Norman Schwartz
Chairman of the Board

Louis Drapeau
Director

Robert M. Malchione
Director

Joel McComb
Director

Deborah J. Neff
Director

Alice N. Schwartz
Director

OFFICERS

Norman Schwartz
President and
Chief Executive Officer

John Goetz
Executive Vice President,
Chief Operating Officer

Giovanni Magni
Executive Vice President,
Chief Strategy Officer

Christine Tsingos
Executive Vice President,
Chief Financial Officer

Michael Crowley
Executive Vice President,
Global Commercial Operations

Shannon Hall
Executive Vice President,
President, Life Science Group

John Hertia
Executive Vice President,
President,
Clinical Diagnostics Group

Ronald Hutton
Vice President, Treasurer

James Stark
Vice President,
Corporate Controller

OTHER SENIOR EXECUTIVES

Lee Boyd
Senior Vice President,
Commercial Manager,
Asia

John Bussell
Senior Vice President,
Global Operations,
Clinical Diagnostics

Patrick Bugeon
Senior Vice President,
International Government Affairs

Colleen Corey
Senior Vice President,
Global Human Resources

Diane Dahowski
Senior Vice President,
Global Technology & Systems

Regis Duval
Senior Vice President,
Europe, Middle East,
Africa (EMEA)

Scott Jenest
Executive Vice President,
Global Supply Chain

Simon May
Senior Vice President,
Commercial Manager,
Americas

Sandra Reiser
Executive Vice President,
Commercial Manager,
Brazil

Annette Tumolo
Executive Vice President,
General Manager,
Digital Biology Group

ANNUAL MEETING

The Annual Meeting of Stockholders will be held on Tuesday, April 26, 2016 at 4 PM, Pacific Time, at the Corporate Offices of the Company in Hercules, California.

Bio-Rad will provide without charge to each stockholder, upon written request to the Secretary, a copy of its 2015 Annual Report filed with the Securities and Exchange Commission on Form 10-K.

TRANSFER AGENT

Computershare
211 Quality Circle, Suite 210
College Station, Texas 77845
800-962-4284
www.computershare.com

AUDITORS

KPMG LLP

COMMON STOCK

Traded on the
New York Stock Exchange

Class A Common Stock
Symbol **BIO**

Class B Common Stock
Symbol **BIOb**

BIO
LISTED
NYSE

Bio-Rad Laboratories
1000 Alfred Nobel Drive
Hercules, California 94547
510-724-7000
www.bio-rad.com