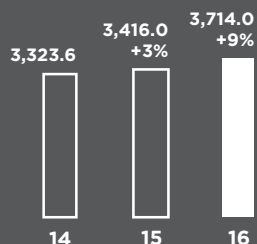


# BARD

# FINANCIAL HIGHLIGHTS

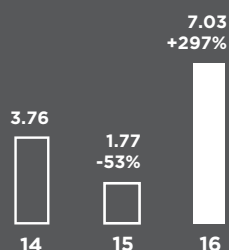
## Net Sales

(in millions of dollars)



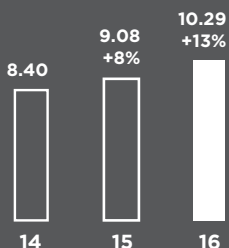
## Diluted Earnings Per Share (EPS) Available To Common Shareholders

(in dollars)



## Diluted EPS Available to Common Shareholders<sup>1</sup>

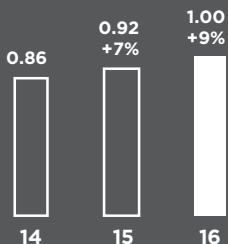
(in dollars)



<sup>1</sup> Adjusting for amortization of intangibles and certain items identified to the right

## Cash Dividends Paid Per Share

(in dollars)



## Operations as of and for the year ended December 31:

(dollars in millions except per share data)

	2016	2015	2014
Net sales	\$ 3,714.0	\$ 3,416.0	\$ 3,323.6
Net income	\$ 531.4	\$ 135.4	\$ 294.5
Diluted earnings per share available to common shareholders	\$ 7.03	\$ 1.77	\$ 3.76
Diluted earnings per share available to common shareholders adjusting for amortization of intangibles and certain items identified below	\$ 10.29	\$ 9.08	\$ 8.40
Cash dividends paid per share	\$ 1.00	\$ 0.92	\$ 0.86
Research and development expense	\$ 292.8	\$ 259.2	\$ 302.0
Return on shareholders' investment	34.0%	8.3%	15.1%
Number of employees	16,300	14,900	13,900

"Net sales in constant currency" and "diluted earnings per share available to common shareholders adjusting for amortization of intangibles and certain items identified below" (adjusted EPS) are non-GAAP financial measures. For a reconciliation of net sales in constant currency and adjusted EPS, see our website at [www.crbard.com](http://www.crbard.com).

## Net Income and Adjusted Earnings Per Share Reconciliation

- Described below are adjustments in each of 2016, 2015 and 2014 for amortization of intangibles and certain items that affect the comparability of the company's results of operations between periods.
- For the year ended December 31, 2016, amortization of intangible assets was \$130.5 million pre-tax and the following items affected the comparability of results between periods: (i) net charges of \$6.6 million pre-tax from acquisition-related items including purchased research and development, transaction costs, purchase accounting adjustments and integration costs; (ii) a charge of \$1.2 million pre-tax related to an asset impairment; (iii) charges of \$205.2 million pre-tax related to estimated costs for product liability matters, net of recoveries; (iv) charges of \$30.4 million pre-tax for restructuring and productivity initiatives; and (v) a decrease of \$2.6 million in the income tax provision as a result of the completion of certain IRS examinations. The net effect of these items decreased net income by \$245.9 million, or \$3.26 diluted earnings per share available to common shareholders.
- For the year ended December 31, 2015, amortization of intangible assets was \$119.5 million pre-tax and the following items affected the comparability of results between periods: (i) net charges of \$31.7 million pre-tax for acquisition-related items including transaction costs, purchase accounting adjustments and integration costs; (ii) a charge of \$4.5 million pre-tax related to an asset impairment; (iii) charges of \$595.1 million pre-tax related to estimated costs for product liability matters, net of recoveries, which includes \$15.1 million of litigation-related defense costs in connection with the District Court's pre-trial orders that the company prepare 500 individual cases for trial (the "WHP Pre-Trial Orders") and other litigation-related charges; (iv) a gain of \$210.5 million pre-tax related to a patent infringement litigation against W.L. Gore & Associates, Inc.; and (v) charges of \$41.5 million pre-tax for restructuring and productivity initiatives. The net effect of these items decreased net income by \$559.7 million, or \$7.31 diluted earnings per share available to common shareholders.
- For the year ended December 31, 2014, amortization of intangible assets was \$108.8 million pre-tax and the following items affected the comparability of results between periods: (i) net charges of \$31.9 million pre-tax for acquisition-related items including purchased research and development, transaction costs, purchase accounting adjustments and integration costs; (ii) a credit of \$3.5 million pre-tax related to the excise tax paid on U.S. medical device sales in 2013 associated with an agreement reached with the IRS during 2014; (iii) a charge of \$6.2 million pre-tax related to an asset impairment; (iv) charges of \$288.6 million pre-tax related to estimated costs for product liability matters, net of recoveries, which includes \$30.1 million of litigation-related defense costs in connection with the WHP Pre-Trial Orders; (v) charges of \$11.8 million pre-tax for restructuring and productivity initiatives; (vi) a gain of \$7.1 million pre-tax related to the sale of an equity investment; and (vii) a decrease of \$10.9 million in the income tax provision associated with the completion of certain IRS examinations. The net effect of these items decreased net income by \$363.9 million, or \$4.64 diluted earnings per share available to common shareholders.

## Important Information Regarding Forward-Looking Statements

This report may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, which are based on management's current expectations, the accuracy of which is necessarily subject to risks and uncertainties. These statements are not historical in nature and use words such as "anticipate," "estimate," "expect," "project," "intend," "forecast," "plan," "believe" and other words of similar meaning in connection with any discussion of future operating or financial performance. Many factors may cause actual results to differ materially from anticipated results including product developments, sales efforts, income tax matters, the outcomes of contingencies such as legal proceedings, and other economic, business, competitive and regulatory factors. The company undertakes no obligation to update its forward-looking statements. Please refer to "Risks and Uncertainties; Cautionary Statement Regarding Forward-Looking Information" in the company's 2016 10-K for more detailed information about these and other factors that may cause actual results to differ materially from those expressed or implied.



# ADVANCING LIVES AND THE DELIVERY OF HEALTH CARE™

C. R. Bard, Inc., is a leading multinational developer, manufacturer and marketer of innovative, life-enhancing medical technologies in the fields of vascular, urology, oncology and surgical specialties. We market our products and services worldwide to hospitals, individual health care professionals, extended-care facilities and alternate-site facilities. We pioneered the development of single-use medical products for hospital procedures, and we are committed to pursuing technological innovations that offer superior clinical benefits while helping to reduce overall health care costs.



**John H. Weiland**  
Vice Chairman, President and  
Chief Operating Officer

**Timothy M. Ring**  
Chairman and  
Chief Executive Officer

“Bard has been successful because our products continue to address unmet needs for patients while solving efficiency and economic issues for our customers, and because our people perform at a high level, meet their commitments and excel at execution.”

# DEAR SHAREHOLDERS

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Faced with flat organic growth and headwinds in many of our developed markets, we committed to an ambitious strategic investment plan that began in 2013 and was intended to both restore growth and enhance our long-term prospects. Our strong performance in 2016 demonstrated the continued effectiveness of this investment plan, the capable execution of our high-performing team and the durability of the improved organic growth profile of the company.

## **GROWING ACROSS THE BOARD, AROUND THE WORLD**

Our success is truly global in nature. We launched 45 new products in 2016 and exhibited broad strength across the portfolio in each of our four businesses, both in the United States and internationally.

Our Vascular business performed near the top of our guidance range for the year, as we continue to see very strong growth from the LUTONIX® drug-coated balloon (DCB) globally. Recently, the U.S. Food & Drug Administration moved the primary endpoint for the LUTONIX® Below-the-Knee trial from 12 to 6 months, and, with more indications expected in 2017 and 2018, we believe our leadership in the DCB market will continue. Our stent portfolio saw improved growth in 2016, and we are investing in new stent platforms for future growth (see page 7). Our biopsy portfolio of products also made strong contributions in 2016, driven by exceptional growth in emerging markets.

Our Oncology business performed above the guidance range we provided, led by our dialysis products, ports, peripherally-inserted central catheters (PICCs) and midline catheters. Each of these products exhibited particular strength outside the U.S.

In Urology, we performed well above the guidance range, with strong growth in basic drainage products. We also integrated Liberator Medical Holdings, Inc. (“Liberator”), a direct-to-consumer business that enhances our access to the growing home care market, specifically for intermittent self-catheterization products, including our recently introduced MAGIC<sup>3</sup> Go® hydrophilic intermittent catheter (see page 8). We believe home health is a key growth market as the population ages and more health care takes place outside of the traditional hospital setting. In Targeted Temperature Management, we are starting a new Fever Management trial for stroke patients, laying the groundwork for future indications for this unique and innovative technology.

Surgery also performed well above our guidance range. Our synthetic hernia repair category exhibited the best growth we've seen in over a decade, driven by our revolutionary self-absorbing hernia repair products. Fixation products, including new products like the CAPSURE™ Permanent Fixation System, and our biosurgery product line, led by the ARISTA® AH absorbable hemostat, were also key drivers of growth in 2016. Overall, we believe we have the broadest portfolio of biological and synthetic soft-tissue repair products on the market.

Emerging market sales represented 10% of our total revenue in 2016, and we believe significant room for growth remains as we continue to develop markets for our PICCs, hernia repair products (see page 11), biopsy devices and other products where we can provide strong value to customers and their patients. We also strengthened our position in Japan, one of the most significant and well-developed medical device markets in the world, as we successfully integrated our former joint venture partner, Medicon, as a wholly owned subsidiary.

## **PARTNERING WITH OUR CUSTOMERS**

Because we emphasize adding value by solving clinical problems while reducing costs across the spectrum of care, our customers have long considered us to be more of a solutions partner than a supplier. Our ability to support these solutions with sound economic and clinical data plays a critical role in partnering with our customers to meet their needs.

As recently as 2014, we had one person who was focused on the science of health care economics and outcomes research. At the end of 2016, there were 37 professionals at Bard dedicated to this field full-time, working in each of our divisions and major regions. This team provides us with the research data and analysis that helps us capitalize on global growth opportunities. They also help us calculate—and communicate—the value of our products in terms of patient outcomes and overall costs to the broader health care system.

We also partner with customers to help improve the safety of both the patient and the clinician. For example, the technology in our SHERLOCK 3CG® tip confirmation system, which is also integrated into our SITE-RITE® 8 ultrasound system, is used in approximately two-thirds of our PICCs placed bedside in the U.S. This allows those customers to move away from confirmatory X-rays, which protects patients and health care workers from unnecessary radiation. We estimate that this effort has already eliminated 960,000 X-rays in the U.S. annually, saving the health care system at least \$48 million per year.<sup>(1)</sup> Similarly, the GEOALIGN® marker bands recently introduced on several peripheral vascular catheters are designed to increase procedure efficiency and minimize fluoroscopy exposure. Using these external markers as a guide, physicians are able to reduce the amount of fluoroscopy needed to align therapies at the treatment site, thereby reducing radiation exposure to the patient, the physician and the catheter lab staff.<sup>(2)</sup>

Due to the passage of the Affordable Care Act (ACA), U.S. hospitals have begun to receive penalties for high central-line-associated bloodstream infection rates and catheter-associated urinary tract infection rates. As a result, hospital administrators have been reviewing their protocols. Our ALLPOINTS™ Training Program teaches the safe and effective use of our PICCs, central venous catheters, dialysis catheters and port access needles in a manner consistent with their respective instructions for use, and uses Lean Six Sigma principles to help hospitals eliminate variance in the care and maintenance of central lines. To help reduce variance in Foley catheter management practices, we designed the SURESTEP® Foley

(1) Based upon 12-month average RN bedside PICC utilization. Savings calculation based on above figure multiplied by \$50, the average cost of a chest X-ray. 2016 Data on File, BAS, Salt Lake City, UT.

(2) The GEOALIGN® Marking System was evaluated in an animal study (repeat PTA in swine artery) that was performed by 3 physicians who tested the LUTONIX® 035 DCB (no drug) and the ULTRAVERSE® 035 PTA Catheter, both with the GEOALIGN® Marking System, to POBA with no GEOALIGN® markings (n=112, test n=96 (with an average placement time of 66 seconds), control n=16 (with an average placement of 90 seconds)). Animal data on file. Animal test results may not be indicative of clinical performance. Different test methods may yield different results.

tray to intuitively guide users through the proper aseptic insertion technique as they work through the components of the tray.

We don't know how the ACA and similar regulations may change or evolve in the years ahead, but we believe we are well-positioned to help our customers navigate the changing landscape with a focus on improved clinical outcomes and value that benefit the broader health care system.

## MANAGEMENT AND BOARD OF DIRECTORS

Marc C. Breslawsky retired from our Board of Directors after most recently serving as a member of the Audit, Finance (Chair) and Science and Technology Committees. Since 1996, we have benefited from the knowledge and experience he gained as Chairman and Chief Executive Officer of Imagistics International Inc., as well as his experience on both the executive and finance committees of other large public companies. We thank him for his 20 years of devoted service to Bard.

On the management side, we bid farewell to Andrea J. Casper, Vice President Global Regulatory Affairs. We thank her for her contributions to Bard, and wish her all the best in retirement. We are also excited to welcome Tony Johnson, Vice President, Global Operations, and Gerard D. Porreca III, Vice President, Quality, Regulatory and Medical Affairs.

## THE YEAR AHEAD

At Bard, we prioritize long-term results over any annual performance, even when that year is as strong as 2016. Throughout 2016, as we performed above expectations, we increased investments designed for attractive long-term growth. In 2017, we plan to continue to make investments that provide our shareholders with above average revenue growth and attractive profitability. That means continuing to invest in faster-growing geographies and product segments and seeking to acquire attractive new growth platforms. It also means continuing to be a valued partner to our customers and patients.

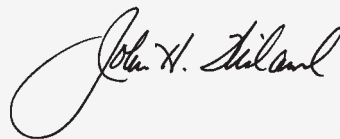
Bard has been successful because our products continue to address unmet needs for patients while solving efficiency and economic issues for our customers, and because our people perform at a high level, meet their commitments and excel at execution. We thank our employees for working collaboratively to make our achievements in 2016 possible, and look forward to their help in sustaining our winning culture in 2017 and beyond.

As always, we also want to thank you, our shareholders, for your continued support.

Sincerely,

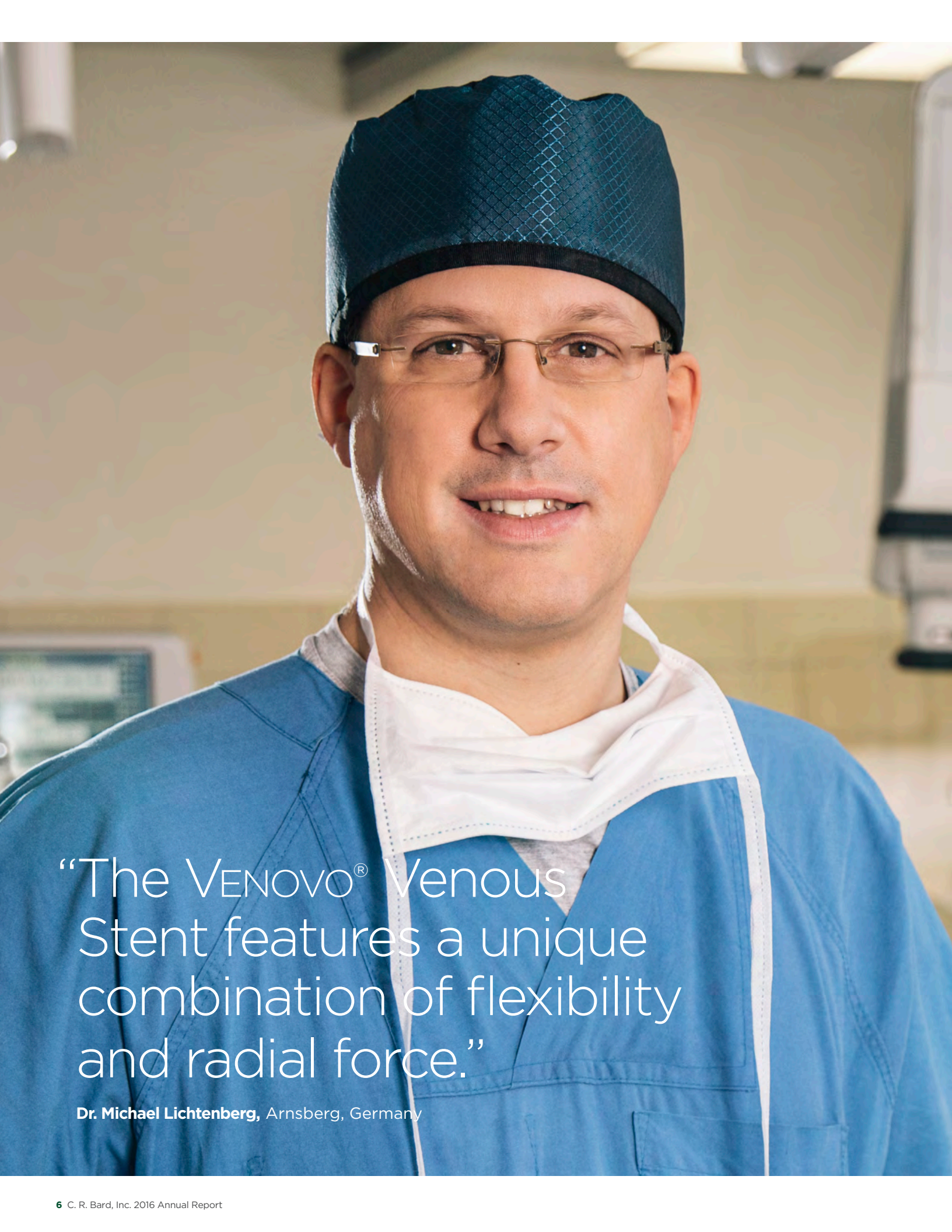


**Timothy M. Ring**  
Chairman and  
Chief Executive Officer



**John H. Weiland**  
Vice Chairman, President and  
Chief Operating Officer

February 27, 2017



“The VENOVO<sup>®</sup> Venous Stent features a unique combination of flexibility and radial force.”

**Dr. Michael Lichtenberg**, Arnsberg, Germany





# SPECIFIC BY DESIGN

Leg pain, swelling and ulceration can affect an individual's quality of life. Unaware that these could be signs of a blood clot in the leg, those who suffer from deep vein thrombosis (DVT) may go untreated, risking a potentially fatal pulmonary embolism if the clot makes its way from their leg to a lung. Too often, those who do seek treatment suffer a recurrence of their symptoms or poor outcomes.

In recent years, physicians have begun placing stents to maintain blood flow in the iliac and femoral veins after treatment for DVT. These stents are often designed for placement in arteries—not in veins. Veins are larger than arteries, so venous stents should be larger in diameter. In addition, veins have lower pressure than arteries, and the lesions that form within them may have a fibrotic consistency that requires more radial force and compression resistance than is found in an arterial stent. The venous stent must also maintain the flexibility to withstand the movement and flexing of the natural vessel. Bard has a stent designed specifically for these criteria: the VENOVO® Venous Stent.

“After sufficient venous recanalization, a significant clinical improvement can usually be seen very shortly after the procedure,” says Dr. Michael Lichtenberg, an interventional angiologist at Karolinen Hospital in Arnsberg, Germany. After restoring blood flow with a large-diameter, high-pressure PTA dilatation catheter, Dr. Lichtenberg places a VENOVO® Venous Stent, a self-expanding nitinol stent that offers physicians the largest range of lengths and diameters for treating iliofemoral stenosis, a narrowing of the blood vessel.

Depending on the patient's condition, the procedure can be challenging, but Dr. Lichtenberg says the stent placement itself is relatively simple. “The VENOVO® Venous Stent features a unique combination of flexibility and radial force, which is quite important for venous recanalization,” he explains. With its user-friendly tri-axial, over-the-wire delivery system and dual-speed thumbwheel, “I can implant the stent very precisely.”

Commercially available in Europe since 2015, the VENOVO® Venous Stent is the subject of an investigational study that is actively recruiting patients in the United States.

# MAKING THE RIGHT CALL

Karen Hallwyler knows there is no such thing as a dumb question. “Asking questions is the only way you learn,” says the retired French teacher, who still tutors students of all ages. Following a bladder operation in 1998, Karen was no longer able to void completely, and she began to self-catheterize several times a day. While it was easy enough to order catheters, it was a challenge to get sound advice or answers to her questions. Then she saw a television ad for Liberator and wondered, “What do I have to lose?”

“I had tried several other catheter companies through the years and wasn’t happy with any of them,” she recalls. “But from the moment of my first conversation with my Liberator representative, I knew I had made the right call.”

Acquired by Bard in January 2016, Liberator is one of the leading providers of direct-to-consumer medical supplies in the United States, with a prime focus on sterile urinary catheters, urological supplies and ostomy supplies. For Karen, the broad selection and ordering convenience is secondary to the outstanding customer service that she has received.

“I’ve had the same representative since I started with Liberator in 2013,” says Karen. “She knows about my health issues, so she calls with ideas when I have questions. There’s nothing I can ask that will embarrass her.”

Last spring, when her representative told Karen about Bard’s new MAGIC<sup>3</sup> Go<sup>®</sup> hydrophilic intermittent catheter, she quickly volunteered to be in the sample group. With a handle that improves control, discreet packaging and a new coating that keeps the catheter hydrated and ready to go right out of the package, she found it to be superior to any other catheter she had tried.


“Liberator is the only company where I’ve had a relationship with a customer service representative, and ‘service’ is the optimal word,” says Karen. “Combined with her warmth, enthusiasm and caring personality, that’s something you don’t get from other businesses.”





“From the moment of my first conversation, I knew I had made the right call.”

**Karen Hallwyler**, Eugene, Oregon

A close-up portrait of Dr. Pradeep Chowbey, an elderly man with grey hair, wearing a dark blue pinstriped suit jacket, a light blue shirt, and a dark tie with red polka dots. He is looking slightly to the right of the camera with a calm expression. The background is a blurred hospital or office setting with other people and equipment.

“In my opinion and experience, VENTRALIGHT<sup>®</sup> ST Mesh provides a strong repair and better patient outcomes.”

**Dr. Pradeep Chowbey**, New Delhi, India



# THE CHOICE OF LEADERS

As the second-most populous nation on Earth, India is naturally one of the biggest potential markets for hernia repair products. Bard began a direct sales operation there in 2004; a sales force expansion beginning in 2012 nearly quadrupled business in just four years. It was during this time that Dr. Pradeep Chowbey, Chairman of the Max Institute of Minimal Access, Metabolic & Bariatric Surgery in New Delhi, adopted Davol's hernia repair products as his own standard of care.

Dr. Chowbey—who has served as a surgeon to the Dalai Lama and honorary surgeon to the president of India—is a pioneer of laparoscopic ventral hernia repair (LVHR) surgery on the subcontinent, where he has been performing the minimally invasive procedure for more than two decades. For LVHR, he relies on the VENTRALIGHT® ST Mesh, which features an uncoated lightweight monofilament polypropylene mesh on the anterior side with an absorbable hydrogel barrier based on SEPRA® technology on the posterior side.

Because of its low-profile design, “the VENTRALIGHT® ST Mesh ensures easy handling and positioning; even larger mesh sizes can be accommodated in the trocars,” Dr. Chowbey explains. “I like the hydrogel barrier, which is different from other meshes.” The hydrogel barrier is designed to minimize the chances of tissue attachment to the mesh.\* “In my opinion and experience, VENTRALIGHT® ST Mesh provides a strong repair and better patient outcomes due to the unique hydrogel barrier,” he says.

The mesh itself is just one component of a successful hernia repair procedure. Depending on the nature of the individual case, Dr. Chowbey uses either the SORBAFIX™ Absorbable Fixation System or the CAPSURE™ Permanent Fixation System, which was recently introduced in India and features a smooth polyetheretherketone cap that eliminates the exposed metal tip, which is designed to minimize adhesions to the fastener.\* “The CAPSURE™ system was one product which I was looking forward to using,” he says. “My initial experience is promising.”

With the support of respected surgeons like Dr. Chowbey and an enormous market for hernia repair devices that has barely been tapped, Bard's potential in India looks promising as well.

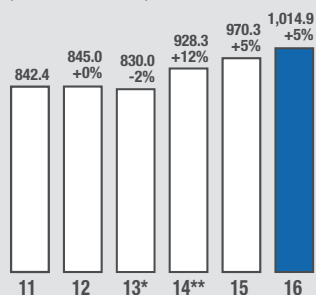
\* Preclinical data on file at C. R. Bard. Results may not correlate to performance in humans.

# PRODUCT GROUP REVIEW

## VASCULAR

### Net Sales

(in millions of dollars)



### Key Products

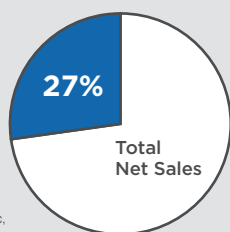
**Endovascular**  
 Biopsy Devices  
 Peripheral Angioplasty Catheters  
 Drug-coated PTA Balloons  
 Vena Cava Filters  
 Peripheral Vascular Stents and Stent Grafts

**Grafts**  
 Dialysis Access Grafts  
 Peripheral Vascular Grafts

**Five-Year Compound Growth Rate: 3.8%**

### 2016 Net Sales Growth

Vascular	Reported	Constant Currency
Endovascular	8%	9%
Grafts	-2%	-1%
<b>Total Vascular</b>	<b>5%</b>	<b>6%</b>



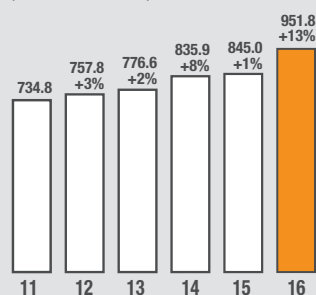
\* In November 2013, Bard sold its electrophysiology division to Boston Scientific, retaining only the guidewire and temporary pacing electrode product lines.

\*\* In 2014, the company began receiving royalty payments from W. L. Gore & Associates, Inc.

## UROLOGY

### Net Sales

(in millions of dollars)



### Key Products

**Basic Drainage**  
 Intermittent Self Catheters  
 Urinary Catheters and Trays  
 Infection Control Foley Catheters  
 Ureteral Catheters and Stents  
 Urine Collection Devices

**Continance**  
 Ostomy Devices  
 Fecal Incontinence Products  
 Continance Management Devices

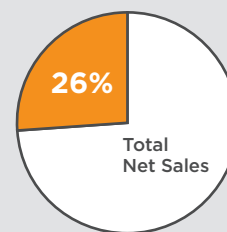
**Urological Specialties**  
 Brachytherapy Services, Seeds and Accessories  
 Specialty Foley Catheters  
 Stone Management Devices

**Catheter Stabilization**  
 Targeted Temperature Management Products

**Five-Year Compound Growth Rate: 5.3%**

### 2016 Net Sales Growth

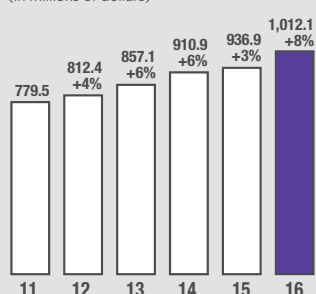
Urology	Reported	Constant Currency
Basic Drainage	15%	16%
Continance	24%	28%
Urological Specialties	7%	9%
Catheter Stabilization	-3%	-2%
<b>Total Urology</b>	<b>13%</b>	<b>14%</b>



## ONCOLOGY

### Net Sales

(in millions of dollars)



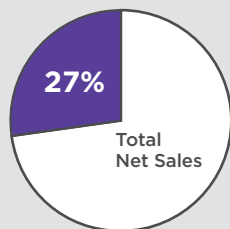
### Key Products

Implantable Ports  
 Peripherally Inserted Central Catheters (PICCs)  
 Dialysis Access Catheters (Dialysis)  
 Vascular Access Ultrasound (Ultrasound)

**Five-Year Compound Growth Rate: 5.4%**

### 2016 Net Sales Growth

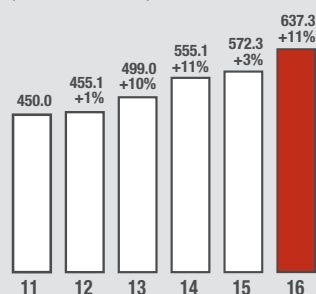
Oncology	Reported	Constant Currency
Ports	8%	8%
PICCs and Midlines	7%	8%
Dialysis	10%	11%
Ultrasound	8%	9%
<b>Total Oncology</b>	<b>8%</b>	<b>9%</b>



## SURGICAL SPECIALTIES

### Net Sales

(in millions of dollars)



### Key Products

**Soft Tissue Repair**  
 Inguinal Hernia Repair Products  
 Ventral Hernia Repair Products  
 Complex Hernia Repair Products  
 Breast Reconstruction Products  
 Surgical Fixation Devices

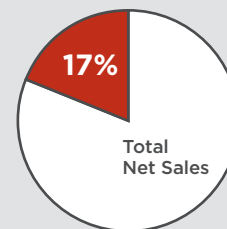
**Performance Irrigation**  
 Laparoscopic Devices and Accessories

**Biosurgical Products**  
 Surgical Hemostats  
 Surgical Sealants

**Five-Year Compound Growth Rate: 7.2%**

### 2016 Net Sales Growth

Surgical Specialties	Reported	Constant Currency
Soft Tissue Repair	11%	12%
Performance Irrigation	-8%	-8%
Biosurgical Products	18%	19%
<b>Total Surgical</b>	<b>11%</b>	<b>12%</b>



## 2016 CHARLES RUSSELL BARD AWARD RECIPIENTS



These employees were nominated by their colleagues for their exemplary performance and commitment to Bard's principles of Quality, Integrity, Service and Innovation. Each has also demonstrated the highest of personal values through a dedication to community and family.

**Front, L-R:**

**Marijke Lammens**  
Supply Chain Manager  
European Distribution Center  
Olen, Belgium

**Daniel A. Collins**  
Associate Director  
Strategic Sourcing  
Corporate, Global Operations  
Murray Hill, NJ

**Ada Zhang**  
Marketing Director  
Bard China  
Shanghai, China

**Linda Velazquez Almodovar**  
Senior Quality  
Assurance Manager  
Bard Shannon, Ltd.  
Humacao, PR

**Middle, L-R:**

**Dana Allyn**  
Clinical Specialist Manager  
Bard Access Systems  
Salt Lake City, UT

**Leonor Olivares Hernandez**  
Customer Service  
Representative  
Bard Mexico  
Mexico City, Mexico

**Kathy Czelusniak**  
Senior Project Engineer  
Glens Falls Technology Center  
Queensbury, NY

**Ellen Callahan**  
Accounts Payable/  
Rebate Supervisor  
Daval Inc.  
Warwick, RI

**Brian Edwards**  
Senior Business Process Manager  
Global Distribution Center  
Covington, GA

**Rear, L-R:**

**Nathan Royds-Jones**  
North Region  
Financial Controller  
Bard EMEA  
Crawley, UK

**Ariel Gonzalez Dominguez**  
Custom Kits Project Leader  
Bard Operations Center  
Reynosa, Mexico

**Lissa Garcia**  
Associate Director of Marketing  
Bard Peripheral Vascular  
Tempe, AZ

**Manoj Koshy Mathai**  
Account Manager - BMD  
Bard Canada  
Oakville, ON

**Michael Auer**  
Senior Manager  
Bard Care, National Accounts  
Bard Medical Division  
Covington, GA

# BOARD OF DIRECTORS



**Timothy M. Ring**  
Chairman and  
Chief Executive Officer  
C. R. Bard, Inc.



**Gail K. Naughton, PhD**  
Chairman and  
Chief Executive Officer  
Histogen, Inc.



**David M. Barrett, MD**  
Emeritus President and Chief  
Executive Officer  
The Lahey Clinic  
Clinical Professor of Surgery  
Dartmouth Medical School



**Tommy G. Thompson**  
Former U.S. Department of  
Health & Human  
Services Secretary  
Former Governor of Wisconsin



**Robert M. Davis**  
Executive Vice President  
and Chief Financial Officer  
Merck & Co., Inc.



**John H. Weiland**  
Vice Chairman, President and  
Chief Operating Officer  
C. R. Bard, Inc.



**Herbert L. Henkel**  
Retired Chairman and  
Chief Executive Officer  
Ingersoll-Rand Company



**Anthony Welters**  
Executive Chairman of  
Blacklvy Group LLC



**John C. Kelly**  
Retired Vice President  
and Controller  
Wyeth



**Tony L. White**  
Retired Chairman, President  
and Chief Executive Officer  
Applied Biosystems, Inc.



**David F. Melcher**  
President and  
Chief Executive Officer  
Aerospace Industries  
Association



# CORPORATE LEADERSHIP TEAM

---

**Timothy M. Ring\***

Chairman and  
Chief Executive Officer

**John H. Weiland\***

Vice Chairman, President and  
Chief Operating Officer

**Christopher S. Holland\***

Senior Vice President and  
Chief Financial Officer

**Jim C. Beasley\***

Group President

**Timothy P. Collins\***

Group President

**John P. Groetelaars\***

Group President

**Sharon M. Luboff\***

Group Vice President

**John A. DeFord, PhD\***

Senior Vice President  
Science, Technology  
and Clinical Affairs

**Samrat S. Khichi\***

Senior Vice President,  
General Counsel  
and Secretary

**Patricia G. Christian**

Vice President  
Regulatory Affairs

**Todd W. Garner**

Vice President  
Investor Relations

**Tony Johnson**

Vice President  
Global Operations

**Kevin Kelly**

President  
Corporate Accounts  
Management

**Betty D. Larson\***

Vice President  
Human Resources

**Brian J. Leddin**

Vice President  
Global Ethics and  
Compliance Officer

**Scott T. Lowry**

Vice President  
and Treasurer

**Frank Lupisella Jr.\***

Vice President  
and Controller

**Gerard D. Porreca III\***

Vice President  
Quality, Regulatory  
and Medical Affairs

**Patrick D. Roche**

Vice President  
Information  
Technology Solutions

**Richard C. Rosenzweig**

Vice President, Law  
and Assistant Secretary

**Gin Schulz**

Vice President  
Quality Assurance

\* Denotes Executive Officer

# CORPORATE INFORMATION

## CORPORATE OFFICES

730 Central Avenue  
Murray Hill, New Jersey 07974  
(908) 277-8000  
www.crbard.com

## AUDITORS

KPMG LLP  
51 John F. Kennedy Parkway  
Short Hills, New Jersey 07078-2778

## ANNUAL MEETING

10:00 a.m., Wednesday, April 19, 2017  
Wyndham Hamilton Park Hotel and Conference Center  
175 Park Avenue  
Florham Park, NJ 07932

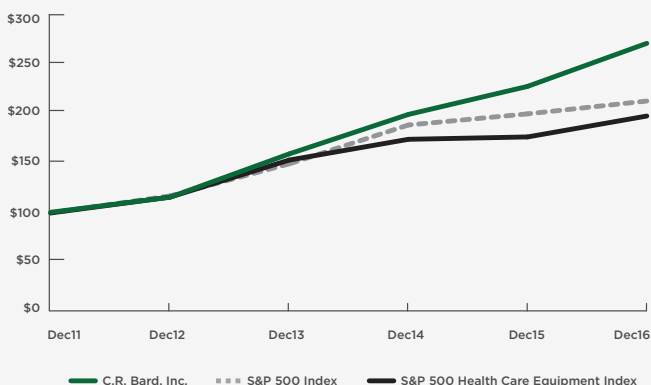
## SHAREHOLDER INFORMATION

Additional shareholder or investor information on Bard's reports or filings with the SEC, Corporate Governance Guidelines, Code of Ethics for Senior Financial Officers and other governance materials are posted on Bard's website at [www.crbard.com](http://www.crbard.com). Shareholders may receive, without charge, printed copies of these documents by contacting our corporate offices, attention:

Todd W. Garner  
Vice President - Investor Relations  
(908) 277-8065

## COMPARISON OF FIVE-YEAR CUMULATIVE TOTAL RETURNS

The graph below compares the cumulative total shareholder return on Bard common stock for the last five years with the cumulative total return on the S&P 500 Index and the S&P 500 Health Care Equipment Index over the same period. The graph assumes the investment of \$100 in each of Bard common stock, the S&P 500 Index and the S&P 500 Health Care Equipment Index on December 31, 2011, and that all dividends were reinvested.



## STOCK LISTED

New York Stock Exchange (NYSE)  
Symbol: BCR

## SUSTAINABILITY

Read our Sustainability Report at  
[www.crbard.com/Social-Responsibility.html](http://www.crbard.com/Social-Responsibility.html)

## REGISTRAR AND TRANSFER AGENT

Computershare Trust Company, N.A.  
Shareholder Relations  
211 Quality Circle, Suite 210  
College Station, TX 77845  
(800) 446-2617  
[www.computershare.com/investor](http://www.computershare.com/investor)

Please direct inquiries regarding change of address, lost certificates and other share transfer matters to the above address.

## COMPUTERSHARE INVESTMENT PLAN FOR SHAREHOLDERS

Registered shareholders and non-shareholders may purchase Bard common stock at any time with a low fee structure compared with normal brokerage fees. Dividends may be reinvested in Bard common stock at no cost to the shareholder. The plan is a convenient and economical way for shareholders to initiate and increase their investment in Bard through the purchase of shares with voluntary cash payments and/or all or part of their dividends. Cash payments may be made by mail or through automatic monthly deductions from their bank account.

For details or enrollment in the Computershare Investment Plan or for direct deposit of dividends, simply contact Computershare, which administers these programs for Bard. Please direct inquiries to:

Computershare Investment Plan  
for Shareholders of C. R. Bard, Inc.  
Computershare Trust Company, N.A.  
211 Quality Circle, Suite 210  
College Station, TX 77845  
(800) 446-2617  
[www.computershare.com/investor](http://www.computershare.com/investor)

## PROPOSED NEXT FOUR DIVIDEND DATES

2017	Record Date	Payment Date
Second	May 1	May 12
Third	July 24	August 4
Fourth	October 23	November 3

2018		
First	January 22	February 2

Bard, Advancing Lives and the Delivery of Health Care, AllPoints, Arista, Atlas, CapSure, Crosser, GeoAlign, Lutonix, Magic3, Medicon, Sherlock 3CG, Site-Rite, Sorbafix, SureStep, Venovo and Ventralight ST are trademarks and/or registered trademarks of C. R. Bard, Inc. Septra is a trademark of Genzyme Corporation.

All other trademarks are the property of their respective owners.

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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D. C. 20549

**FORM 10-K**

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

For the fiscal year ended December 31, 2016

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

Commission File Number: 1-6926

**C. R. BARD, INC.**

(Exact name of registrant as specified in its charter)

New Jersey  
(State or other jurisdiction of incorporation  
or organization)

730 Central Avenue  
Murray Hill, New Jersey 07974  
(Address of principal  
executive offices)

22-1454160  
(I.R.S. Employer  
Identification No.)

Registrant's telephone number, including area code: (908) 277-8000

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

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
Common Stock - \$.25 par value	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 Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) 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 the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

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

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

The aggregate market value of the voting stock held by nonaffiliates of the registrant was approximately \$17,273,587,263 based on the closing price of stock traded on the New York Stock Exchange on June 30, 2016. As of January 31, 2017, there were 72,030,026 shares of Common Stock, \$.25 par value per share, outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the company's definitive Proxy Statement in connection with its 2017 annual meeting of shareholders are incorporated by reference into Part III of this Form 10-K.

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**C. R. BARD, INC. AND SUBSIDIARIES**

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**PART I**

**Item 1. Business**

**General**

C. R. Bard, Inc. and its subsidiaries (the “company” or “Bard”) are engaged in the design, manufacture, packaging, distribution and sale of medical, surgical, diagnostic and patient care devices. Charles Russell Bard founded the company in 1907. In 1923, the company was incorporated as C. R. Bard, Inc. and distributed an assortment of urological and surgical products. Bard became a publicly traded company in 1963 and began trading on the New York Stock Exchange five years later. Currently, the company sells a broad range of products to hospitals, individual healthcare professionals, extended care facilities and alternate site facilities on a global basis. In general, Bard’s products are intended to be used once and then discarded or either temporarily or permanently implanted. The company participates in the markets for vascular, urology, oncology and surgical specialty products. Bard’s product strategy is based on the following tenets, which are designed to position the company for continued growth:

- *Clinician Preference* - Bard targets markets where clinicians drive purchasing decisions based on the benefits a product provides to patients;
- *Product Leadership* - The company pursues opportunities in markets where products that consistently provide superior clinical outcomes and medical economic value can attain a leadership position;
- *Market Growth* - Bard focuses its investments in fast-growing and/or under-served markets;
- *Competitive Advantage* - The company strives to achieve a sustainable competitive advantage through product quality and innovation, intellectual property protection and a core competency in managing complex clinical and regulatory requirements; and
- *Product Diversity* - Bard offers a broad, diverse product portfolio to balance the risks inherent in the highly competitive and complex medical device industry.

Bard’s execution of this strategy has helped the company establish market leadership positions across its four product group categories. In 2016, approximately 75% of the company’s net sales were derived from product lines in which the company holds a number one or number two market share position.

**Product Group Information**

The company reports its sales in four major product group categories: vascular, urology, oncology and surgical specialties. The company also has a product group of other products. The following table sets forth for the three years ended December 31, 2016, 2015 and 2014 the approximate percentage contribution by category to Bard’s consolidated net sales on a worldwide basis.

	For the Years Ended December 31,		
	2016	2015	2014
Vascular	27%	28%	28%
Urology	26%	25%	25%
Oncology	27%	27%	27%
Surgical Specialties	17%	17%	17%
Other	3%	3%	3%
Consolidated net sales	<u>100%</u>	<u>100%</u>	<u>100%</u>

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### **Vascular Products**

Bard's vascular products cover a wide range of minimally invasive devices for the treatment of peripheral vascular disease ("PVD") and end-stage renal disease ("ESRD"). These products include: percutaneous transluminal angioplasty ("PTA") catheters, chronic total occlusion ("CTO") catheters, guidewires, fabrics, meshes, introducers and accessories; valvuloplasty balloons; peripheral vascular stents, self-expanding and balloon-expandable covered stents and vascular grafts; vena cava filters; and biopsy devices. Bard's low-profile catheter and high-pressure balloon technology has made Conquest®, Atlas® and Dorado® PTA catheters leading choices of clinicians for the treatment of arterial venous access stenosis and other PVDs. Bard began selling the Lutonix® drug-coated PTA balloon for the treatment and prevention of vascular disease in Europe in 2012 and in the United States in October 2014, upon receipt of regulatory approval from the United States Food and Drug Administration ("FDA"). The company's Ultraverse® and VascuTrak® PTA catheters and Crosser™ CTO catheter give Bard one of the broadest offerings in the small-vessel segment of the PVD market. Bard's line of peripheral vascular stents, covered stents and vascular grafts includes the Flair® AV (arterial venous) Access Stent Graft, E•Luminexx® and LifeStar® Iliac Stents, and the LifeStent® family of stents approved for use in the superficial femoral and proximal popliteal arteries. Bard's vena cava filters product line includes devices that can be either permanently implanted or retrieved after the threat of blood clots traveling from the lower extremities to a patient's lungs has passed. Bard also offers products for the treatment of ESRD through a broad line of long-term dialysis catheters with market leading products including GlidePath™, Equistream®, Decathlon®, Hickman® and Reliance® catheters. Bard also offers a market leading portfolio of automatic core needle biopsy devices including MaxCore®, Magnum®, the Mission™ lightweight semi-automatic biopsy device and the Marquee™ disposable core biopsy instrument. Bard's Vacora® and Finesse® devices combine the benefits of a vacuum-assisted biopsy technology with a portable, self-contained needle system for the diagnosis of breast tumors. Bard offers a wide variety of products across the percutaneous breast biopsy and tissue marker segments. The EnCor® and EnCor Enspire® breast biopsy systems allow for ultrasound-, stereotactic- and MRI-guided breast biopsy procedures, and Bard's breast tissue markers include the SenoMark®, StarchMark®, Gel Mark®, UltraClip® and UltraCor® product lines. In 2014, the company began recording revenue related to royalty payments received from W.L. Gore & Associates Inc. ("Gore").

### **Urology Products**

Bard's urology products include basic urology drainage products, fecal and urinary continence products, urological specialty products and Targeted Temperature Management™ products. The Foley catheter, which Bard introduced in 1934, remains one of the most frequently used products in the urology field. The company has a market-leading position in Foley catheters, including the infection control Foley catheter (Bardex® I.C. Foley catheter), which has been proven to substantially reduce the rate of urinary tract infections. The company also has a line of intermittent self-catheters and male external catheters, primarily used in non-acute settings. In January 2016, the company acquired Liberator Medical Holdings, Inc., a durable medical equipment supplier, to vertically integrate and expand its presence in the non-acute segment of the market. Other products include: fecal incontinence products; brachytherapy devices and radioactive seeds used to treat prostate cancer; intermittent urinary drainage catheters, urine monitoring and collection systems; ureteral stents; and specialty devices for stone removal procedures. The company markets the proprietary line of StatLock® catheter stabilization devices, which are used primarily to secure peripheral intravenous catheters, thereby reducing restarts and other complications. These devices are also used to secure many other types of catheters sold by Bard and other companies, including Foley catheters. In addition, the company markets the Arctic Sun® system with proprietary ArcticGel™ pads providing therapy for patients requiring Targeted Temperature Management™.

### **Oncology Products**

Bard's oncology products cover a wide range of devices used in the treatment and management of various cancers and other diseases and disorders. These include specialty vascular access catheters and ports, vascular access ultrasound devices, dialysis access catheters and enteral feeding devices. The company's specialty vascular access products serve a well-established market in which Bard holds a leading position. The features and

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benefits of the company's broad line of peripherally inserted central catheters ("PICCs") have allowed Bard to capitalize on this important segment of the specialty vascular access market. The company's PowerPICC® catheters and PowerPort® devices can also be used to inject contrast media at high flow rates. These devices eliminate the need to place an additional catheter in the significant number of PICC and port recipients who also require contrast enhanced CT (computed tomography) scans. Bard's Site-Rite® vascular access ultrasound device and Sherlock™ tip locator system help nurses place a PICC at a patient's bedside, making PICCs a more convenient and cost-effective treatment option. The company's 3CG Tip Confirmation System™ can be used in place of imaging technologies such as x-rays to confirm proper placement of the PICC prior to treatment. Both Sherlock™ and Sherlock 3CG™ can be integrated into the Site Rite® system facilitating bedside placement. For patients not requiring central venous access, Bard offers a wide range of midline catheters as well as guidewire-assisted peripheral intravenous lines.

### **Surgical Specialty Products**

Bard's surgical specialty products include implanted grafts and fixation devices for hernia and soft tissue repairs in addition to hemostats and surgical sealants. The company's soft tissue repair products consist of hernia repair grafts, including permanent synthetic and bioresorbable synthetic products, natural-tissue configurations, and hernia fixation devices. Bard has a full line of products for inguinal (groin) hernias including the Perfix® Plug and 3D Max® product lines. The company has products for the repair of ventral (abdominal) hernias including the Ventrio®, Ventrio® ST, Ventralex®, Ventralex® ST and Ventralight® ST synthetic grafts. In addition, the company markets the ECHO PS® Positioning System which helps facilitate mesh deployment in laparoscopic surgical repair. Bard also markets the Phasix™ line of products for both inguinal and ventral hernias. The product incorporates advanced polymer technology based on a fully resorbable platform that is resorbed naturally by the body over time. The company's Phasix™ ST incorporates an anti-adhesion layer allowing for laparoscopic placement. Bard's line of natural-tissue products includes the XenMatrix® and Allomax® grafts used to repair complex ventral hernias and soft tissue reconstruction. The company also sells XenMatrix® AB, the first of its kind anti-bacterial natural-tissue surgical graft. The company's hernia fixation devices include OptiFix™, a bioresorbable-tack fixation device and Capsure®, a permanent fixation device for use in laparoscopic and open surgical procedures. Bard also offers the Progel® surgical sealant, which is the only FDA-approved product available for intraoperative sealing of air leaks in connection with open, video-assisted and robotic thoracic surgery. The company's Arista® AH hemostat product line complements Bard's Progel® surgical sealant technology and is a plant based hemostat that is used as an adjunct to mechanical techniques to control bleeding in a variety of surgical procedures.

### **International**

Bard markets its products through subsidiaries to customers in over 100 countries outside the United States. The products sold in the international markets include many of the products described above. However, the principal markets, products and methods of distribution in the company's international businesses vary with market size and stage of development. The company's principal international markets are currently in Europe, China and Japan, and the company expects to continue investing to expand sales and marketing resources in order to capitalize on opportunities in other markets, such as certain emerging markets in Asia, Latin America and Eastern Europe. Generally, the company maintains a geographically-based sales organization that it believes provides greater flexibility in international markets. Approximately 72% of international sales are of products manufactured by Bard in the United States, Puerto Rico or Mexico. For financial reporting purposes, revenues and long-lived assets in significant geographic areas are presented in Note 15 of the notes to consolidated financial statements.

Bard's foreign operations are subject to certain financial and other risks, and international operations in general present complex tax and cash management issues. Relationships with customers and effective terms of sale frequently vary by country. Trade receivable balances outside the United States generally are outstanding for longer periods than in the United States, particularly in Europe. Inventory management is also an important business concern due to the potential for rapidly changing business conditions and currency exposure. Foreign



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currency exchange rate fluctuations can affect income and cash flows of international operations. The company attempts to hedge some of these currency exposures to help reduce the effects of foreign exchange fluctuations on the business. For more information, see Item 1A. “Risk Factors”, Item 7A. “Quantitative and Qualitative Disclosures About Market Risk”, and Note 6 of the notes to consolidated financial statements.

### **Competition**

The company competes in therapeutic and diagnostic medical device markets around the world. These global markets are characterized by rapid changes resulting from technological advances and scientific discoveries. The company’s market position depends on its reliable product quality, dependable service, value proposition and ability to develop products to meet evolving market needs. The company faces a mix of competitors ranging from large manufacturers with multiple business lines to smaller manufacturers that offer a limited selection of products, and to a lesser extent reproducers of single-use medical devices. Many of Bard’s products are patented or are the subject of patent applications. Patent protection also affects the company’s market position.

In keeping with the increased emphasis on cost-effectiveness in healthcare delivery, the trend among hospitals and other customers of medical device manufacturers is to consolidate purchases to enhance purchasing power. The medical device industry has also experienced some consolidation, partly in order to offer a broader range of products to large purchasers. This enhanced purchasing power has placed pressure on product pricing. For more information, see Item 1A. “Risk Factors.”

### **Marketing**

The company’s products are distributed domestically directly to hospitals and other healthcare institutions, as well as through numerous hospital/surgical supply and other medical specialty distributors with whom the company has distribution agreements. In international markets, products are distributed either directly or through distributors, with the practice varying by country. Full-time representatives of the company in domestic and international markets engage in sales promotion. Sales to distributors, which supply the company’s products to many end-users, accounted for approximately 36%, 35% and 34% of the company’s net sales for the years ended December 31, 2016, 2015 and 2014, respectively, and the five largest distributors combined accounted for approximately 51%, 61% and 66%, respectively, of distributors’ sales for the corresponding years. One large distributor accounted for approximately 8% of the company’s net sales in 2016 and 9% of the company’s net sales in each of 2015 and 2014.

In order to service its customers, optimize logistics, lower facilities costs and reduce finished goods inventory levels, the company operates consolidated distribution facilities in both the United States and Europe. Orders are normally shipped within a matter of days after receipt. Backlog is not currently a significant issue for the company.

Most of the products sold by the company, whether manufactured by the company or by others, are sold under the BARD® trade name or trademark and/or other trademarks owned by the company. Products manufactured for the company by outside suppliers are generally produced according to the company’s specifications.

### **Available Information**

The company makes available, free of charge, on its website located at <http://investorrelations.crbard.com>, its annual reports to shareholders, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and any amendments to these reports, as soon as reasonably practicable after such materials are electronically filed with, or furnished to, the U.S. Securities and Exchange Commission (“SEC”) and are accessible to the public at the SEC’s website ([www.sec.gov](http://www.sec.gov)).

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The company has adopted, and has posted on its website, a Code of Ethics for Senior Financial Officers that applies to the company's Chief Executive Officer, Chief Financial Officer and Controller. To the extent required, the company intends to disclose any amendments to, or waivers of, the Code of Ethics on its website. In addition, the company's audit committee charter, compensation committee charter, governance committee charter, corporate governance guidelines and business ethics policy are also posted on the company's website. From time-to-time Bard uses its website to distribute company information, including material information. Financial and other information, including material information regarding the company is routinely posted on and accessible at <http://investorrelations.crbard.com>. In addition, shareholders or interested parties may enroll to automatically receive email alerts and other information about Bard by visiting the "Email Alerts" section at <http://investorrelations.crbard.com>. Shareholders, employees or other interested parties may communicate directly with the Board of Directors, the non-management members of the Board of Directors or the Audit Committee. The process for doing so is described on the company's website.

Except for the documents specifically incorporated by reference into this Annual Report on Form 10-K, information contained on our website, the SEC's website or that can be accessed through these websites are not incorporated by reference into this Annual Report on Form 10-K. Reference to our website and the SEC's website is made as an inactive textual reference.

### **Regulation**

The development, manufacture, sale and distribution of the company's products are subject to comprehensive government regulation both within and outside the United States. Government regulation, including detailed inspection of and controls over research and laboratory procedures, clinical investigations, manufacturing, marketing, sampling, distribution, recordkeeping and storage and disposal practices, substantially increases the time, difficulty and costs incurred in obtaining and maintaining the approval to market newly developed and existing products. Government regulatory actions can result in the seizure or recall of products, suspension or revocation of the authority necessary for their production and sale, and other civil or criminal sanctions.

Medical device laws are in effect in many of the countries in which the company does business outside the United States. These range from comprehensive device approval requirements for some or all of the company's medical device products to requests for product data or certifications. Inspection of and controls over manufacturing as well as monitoring of device-related adverse events are also components of most of these regulatory systems. The number and scope of these requirements are increasing and evolving.

For more information, see Item 1A. "Risk Factors."

### **Third-Party Reimbursement and Healthcare Cost Containment**

Reimbursement remains an important strategic consideration in the development and marketing of medical devices and procedures. Difficulty in obtaining coverage, coding and payment can be a significant barrier to the commercial success of a new product or procedure. The consequences can include slow adoption in the marketplace and inadequate payment levels that can continue for months or even years.

Bard's products are purchased principally by hospitals or physicians, which typically bill various third-party payors, such as governmental programs (e.g., Medicare and Medicaid), private insurance plans and managed care plans, for the healthcare services provided to their patients. In addition, with respect to our durable medical equipment supplier, we also directly bill patients, insurance companies, Medicare and Medicaid. The ability of customers to obtain appropriate reimbursement for products and services from third-party payors is critical to the success of medical device companies because it can affect the products customers purchase and the prices they are willing to pay. Manufacturers such as Bard rely on insurance reimbursement to create favorable markets for their products, while providers depend on this reimbursement to incorporate new products into their medical practices. As the largest single insurer in the United States, Medicare has a profound influence on the healthcare market. The Center for Medicare and Medicaid Services ("CMS") formulates national and local coverage policy

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and sets payment rates for facilities and physician providers. Additionally, most private payors will follow the lead of CMS when developing their policies and payment rates. Technology assessment organizations, including the one run by the Blue Cross Blue Shield Association, are consulted by public and private payors to evaluate the relative merits of new technologies and their impact on net health outcomes in an effort to get as much value for the healthcare dollar as possible.

The processes necessary for a manufacturer to obtain appropriate levels of reimbursement are complex and usually vary from payor to payor. Third-party reimbursements to hospitals and ambulatory care facilities are typically made for procedures or episodes of care, which include the costs of devices, supplies and equipment, and provide an incentive for efficient care and careful use of more expensive technologies.

Third-party payors for hospital services in the United States and abroad are increasingly focused on strategies to control spending on healthcare and reward improvements in quality and patient outcomes. In addition, in an effort to better align incentives for providers, CMS and most large commercial payors have adopted policies that carry penalties for certain preventable, hospital-acquired infections such as catheter-associated urinary tract infections. The company believes that the Bardex® IC products are well-positioned to help its customers prevent certain hospital acquired infections. As payors focus on the net benefits provided by medical technologies, manufacturers are increasingly required to provide evidence not only of the clinical efficacy of their products, but also the economic impact they have on stakeholders in the healthcare system. The company has taken steps in recent years to bolster its health economic and outcomes research capabilities with the goal of meeting the needs of the business and customers around the world. However, the uncertainty and complexity of future legislation seeking to reform the health insurance market and the healthcare delivery system make it difficult to ultimately predict the impact on Bard's business.

For more information, see Item 1A. "Risk Factors."

### **Raw Materials**

The company uses a wide variety of readily available oil-based resins, textiles, alloys and latex materials for the manufacture of its devices. These materials are primarily purchased from external suppliers. Most of the raw materials are available and/or purchased only from single source suppliers. Materials are purchased from selected suppliers for reasons of quality assurance, sole-source availability, cost effectiveness or constraints resulting from regulatory requirements. Bard works closely with its suppliers to assure continuity of supply while maintaining high quality and reliability. For more information, see Item 1A. "Risk Factors."

### **Environment**

The company is subject to various environmental laws and regulations both within and outside the United States. The operations of the company, like those of other medical device companies, involve the use of substances regulated under environmental laws, primarily in manufacturing and sterilization processes. While the company continues to make capital and operational expenditures relating to compliance with existing environmental laws and regulations, management believes that such compliance will not have a material effect on the company's business, results of operations, financial condition and/or liquidity. For more information, see Item 3. "Legal Proceedings."

### **Employees**

The company had approximately 16,300 employees as of December 31, 2016.

### **Seasonality**

The company's business is not affected to any material extent by seasonal factors.

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**Research and Development**

The company is engaged in both internal and external research and development in an effort to introduce new products, to enhance the effectiveness, ease of use, safety and reliability of its existing products, and to expand the applications for which the uses of its products are appropriate. The company is dedicated to developing and acquiring technologies that will furnish healthcare providers with a more complete line of products to treat medical conditions through less invasive procedures and in a cost-effective manner. The company's research and development expenditures, including acquired in-process research and development, were \$292.8 million, \$259.2 million and \$302.0 million in 2016, 2015 and 2014, respectively. The company evaluates developing technologies primarily in areas where it may have technological or marketing expertise for possible investment or acquisition.

**Intellectual Property**

Patents and other proprietary rights are important to Bard's business. The company also relies upon trade secrets, manufacturing know-how, continuing technological innovations and licensing opportunities to maintain and improve its competitive position.

The company owns an extensive portfolio of patents and has numerous patent applications pending in the United States and in certain foreign countries that relate to aspects of the technology used in many of the company's products. The company's policy is to file patent applications in the United States and foreign countries where rights are available and where the company believes it is commercially advantageous to do so. However, the standards for international protection of intellectual property vary widely. The company does not consider its business to be materially dependent upon any individual patent. For more information, see Item 1A. "Risk Factors."

Other than the payments received from Gore, the company does not receive material revenue from licensing of its patents or other intellectual property.

**Item 1A. Risk Factors**

*An investor should carefully consider the risks described below, as well as other information contained in this Annual Report on Form 10-K and in our other filings with the Securities and Exchange Commission, in evaluating our business. Additional risks not presently known to us or that we currently deem immaterial may also adversely affect our business. The occurrence of any of these events or circumstances could individually or in the aggregate have a material adverse effect on our business, results of operations, financial condition and/or liquidity.*

***Defects, failures or quality issues associated with our products could lead to recalls or safety alerts, negative publicity regarding the company and litigation, including product liability claims, that could adversely affect our business and reputation and result in loss of customers. Loss reserves are difficult to estimate.***

The design, manufacture and marketing of medical devices of the types we produce entail inherent risks. Quality is extremely important to us and to our customers because our products are often used in clinically demanding circumstances with seriously ill patients, and many of the medical devices we manufacture and sell are implanted in the human body for long periods of time or indefinitely. Given the circumstances in which our products are often used, defects, failures or quality issues can result in serious and costly consequences. Quality management is essential to prevent defects or failures associated with our products, as well as to improve our products and maintain the integrity of the data that supports the safety and efficacy of our products.

There are a number of factors that could result in an unsafe condition, injury or death of a patient with respect to products that we manufacture or sell, including quality issues, component failures, manufacturing flaws, unanticipated, unapproved or improper uses of our products, design defects or inadequate disclosure of product-related risks or product-related information.

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Any of these issues could lead to an investigation by the FDA or other governmental authorities, recall of, or safety alert relating to, one or more of our products and could ultimately result in the removal of these products from the body and claims against us for costs associated with the removal. Any recall, whether voluntary or required by the FDA or similar governmental authorities in other countries, could result in lost sales, other significant costs and significant negative publicity. Negative publicity concerning our products, competitors' products or the geographic or product markets in which we compete, including regarding a quality or safety issue, whether accurate or inaccurate, could reduce market acceptance of our products, harm our reputation, decrease demand for our products, result in the loss of customers, lead to product withdrawals and/or harm our ability to successfully launch and market our products in the future. The foregoing problems could also result in enforcement actions and/or investigations by state and federal governments or other enforcement bodies, or product liability claims or lawsuits including those being brought by individuals or by groups seeking to represent a class or establish multi-district litigation proceedings. We believe that some settlements and judgments, as well as legal defense costs, may be covered in whole or in part under our product liability insurance policies with a limited number of insurance companies, or, in some circumstances, indemnification obligations to us from other parties. However, amounts recovered under these arrangements may be less than the stated coverage limits or less than otherwise expected and may not be adequate to cover damages and/or costs. In addition, there is no guarantee that insurers or other parties will pay claims or that coverage or indemnity will be otherwise available. For certain product liability claims or lawsuits, the company does not maintain or has limited remaining insurance coverage. See Item 3. "Legal Proceedings" below for a description of lawsuits filed or asserted against us, including the Hernia Product Claims, Women's Health Product Claims and Filter Product Claims (each, as defined below). Moreover, in some circumstances adverse events arising from or associated with the design, manufacture, quality or marketing of our products could result in the FDA suspending or delaying its review of our applications for new product approvals, or imposing post market approval requirements. Any of the foregoing problems could have a material adverse effect on our business, results of operations, financial condition and/or liquidity.

Reserves established for estimated losses, including with respect to legal proceedings, do not represent an exact calculation of our actual liability but instead represent our estimate of the probable loss at the time the reserve is established. Due to the inherent uncertainty underlying loss reserve estimates, additional reserves may be established from time-to-time, and actual losses may be materially higher or lower than the related reserve. Liabilities in excess of our reserves could have a material adverse effect on our business, results of operations, financial condition and/or liquidity.

***We face intense competition from other companies, and our inability to continue to effectively develop, acquire and/or market new products and technologies could have a material adverse effect on our business, results of operations and/or financial condition.***

The medical device business is intensely competitive and is characterized by rapid technological change, frequent product introductions and evolving customer requirements. Our customers consider many factors when choosing among products, including features and reliability, quality, technology, clinical or economic outcomes, availability, price and services provided by the manufacturer. We face competition globally from a wide range of companies, some of which may have greater resources than us, which may enable them to adapt faster than us to customer needs or changes in customer requirements. Product introductions, alternative therapies or enhancements by competitors that provide better features, clinical outcomes or economic value and/or offer lower pricing may make our products or proposed products obsolete or less competitive. In addition, the trend of consolidation in the medical device industry and among our customers could result in greater competition and pricing pressures.

As a result, we engage in product development and improvement programs to maintain and improve our competitive position. These development and improvement programs involve significant investment in research and development, clinical trials and regulatory approvals and may require more time than anticipated to bring such products to market. We may not, however, be successful in enhancing existing products or developing new

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products or technologies that will achieve regulatory approval, be developed or manufactured in a cost effective manner, obtain appropriate intellectual property protection or receive market acceptance and we may be unable to recover all or a meaningful part of our investment in such products or technologies. Additionally, there can be no assurance that the size of the markets in which we compete will increase above existing levels or not decline, that we will be able to maintain, gain or regain market share or that we can compete effectively on the basis of price or that the number of procedures in which our products are used will increase above existing levels or not decline.

As part of our business strategy, we also pursue the acquisition of complementary businesses, technologies and products. We may not be able to identify appropriate acquisition candidates, consummate transactions or obtain agreements with favorable terms. Further, once a business is acquired, any inability to successfully integrate the business, decreases in customer loyalty or product orders, failure to retain and develop its workforce, failure to establish and maintain appropriate controls or unknown or contingent liabilities could adversely affect our ability to realize the anticipated benefits of any acquisition. The integration of an acquired business, whether or not successful, requires significant efforts which may result in additional expenses and divert the attention of our management and technical personnel from other projects. These transactions are inherently risky, and there can be no assurance that any past or future transaction will be successful. If we fail to develop and successfully manufacture and launch new products, generate satisfactory clinical results, provide sufficient economic value, enhance existing products, or identify, acquire and integrate complementary businesses, technologies and products or if we experience a decrease in market size or market share or declines in average selling price or procedural volumes, or otherwise fail to compete effectively, our business, results of operations and/or financial condition could be adversely affected.

***Domestic and foreign legislative or administrative reforms resulting in restrictive reimbursement practices of third-party payors and cost containment measures could decrease the demand for products purchased by our customers, the prices that our customers are willing to pay for those products and the number of procedures using our devices.***

Our products are purchased principally by hospitals or physicians which typically bill various third-party payors, such as governmental programs (e.g., Medicare, Medicaid and comparable foreign programs), private insurance plans and managed care plans, for the healthcare services provided to their patients. The ability of our customers to obtain appropriate reimbursement for products and services from third-party payors is critical to the success of medical device companies because it affects which products customers purchase and the prices they are willing to pay. Reimbursement varies by country and can significantly impact the acceptance of new products and technologies. In addition, with respect to our durable medical equipment supplier, we also directly bill patients, insurance companies, Medicare and Medicaid. Implementation of healthcare reforms or other governmental actions in the United States (such as cuts to Medicare reimbursement) and other countries may limit, reduce or eliminate reimbursement for our products and adversely affect both our pricing flexibility and the demand for our products. For example, effective January 1, 2017, the Medicare Access and CHIP Reauthorization Act of 2015 (“MACRA”) introduced performance-based measures and alternative payment models that could significantly impact physician payment. Even when we develop or acquire a promising new product or technology, we may find limited demand for the product unless reimbursement approval is obtained from private and governmental third-party payors.

Major third-party payors for hospital services in the United States and abroad continue to work to contain healthcare costs through, among other things, the introduction of cost containment incentives and closer scrutiny of healthcare expenditures by both private health insurers and employers, which has resulted in increased discounts and contractual changes impacting healthcare provider charges for services performed. For example, in an effort to decrease costs, certain hospitals and other customers reutilize our products intended for a single use, purchase reprocessed products from third-party reprocessors in lieu of purchasing new products from us or may substitute lower cost products for ours.

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Further legislative or administrative reforms to the reimbursement systems (whether governmental or private) in the United States and abroad, or adverse decisions by administrators of these systems in coverage or reimbursement relating to our products, could significantly reduce reimbursement for procedures using our medical devices or result in the denial of coverage for those procedures. Examples of these reforms or adverse decisions include price regulation, competitive pricing, changes to coverage and payment policies, comparative effectiveness of therapies, technology assessments, managed-care arrangements and accountable care organizations. Any of such reforms or adverse decisions resulting in restrictive reimbursement practices or denials of coverage could have an adverse impact on the acceptance of our products and the prices that our customers are willing to pay for them. These outcomes, along with other cost containment measures, could have a material adverse effect on our business and/or results of operations.

***An interruption in our ability to manufacture or distribute our products or an inability to obtain key components or raw materials or other interruptions of our supply chain may adversely affect our business and/or results of operations.***

We manufacture our products at, and distribute our products from, facilities located throughout the world, some of which are in areas that are prone to hurricanes and other natural disasters. In addition, our operations (including these facilities or any part of our supply chain) could be adversely affected by pandemics, terrorism or other political, economic or social unrest, environmental factors, strikes, work stoppages or slowdowns, or other disasters or factors beyond our control. In some cases, certain of our key products are manufactured at one facility. If an event occurred that resulted in damage to one or more of our facilities or we experience an interruption or disruption of our supply chain, we may be unable to manufacture or distribute the relevant products at previous levels or at all. In addition, we purchase many of the components and raw materials used in manufacturing our products from numerous suppliers located in various countries. For reasons of quality assurance, cost effectiveness or availability, most components and raw materials are only available and/or purchased from sole suppliers. While we work with suppliers to ensure continuity of supply, the price and availability of components and raw materials are subject to numerous factors beyond our control, and no assurance can be given that our efforts will be effective. Due to the stringent regulations and requirements of the FDA and other regulatory authorities regarding the manufacture of our products, we may not be able to quickly establish additional or replacement sources for these components or materials or do so without excessive cost. As a result, a reduction or interruption in manufacturing or distribution or of our supply chain, or an inability to secure alternative sources of raw materials or components, could have a material adverse effect on our business, results of operations and/or financial condition.

***We are subject to a comprehensive system of federal, state and international laws and regulations, and we could be the subject of investigations, enforcement actions or face lawsuits and monetary or equitable judgments.***

We operate in many parts of the world, and our operations are affected by complex state, federal and international laws relating to healthcare, environmental protection, antitrust, anti-corruption, anti-bribery, fraud and abuse, export control, tax, employment and laws regarding privacy, personally identifiable information and protected health information, including, for example, the Food, Drug and Cosmetic Act (“FDCA”), various FDA and international regulations relating to, among other things, the development, quality assurance, manufacturing, importation, distribution, marketing and sale of, and billing for, our products, the federal Anti-Kickback Statute and Federal False Claims Act, the U.S. Foreign Corrupt Practices Act (“FCPA”), the UK Bribery Act of 2010, the federal Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) and other foreign data protection and privacy laws, and laws and regulations relating to sanctions and money laundering. We are subject to periodic inspections to determine compliance with the FDA’s Quality System Regulation requirements, current medical device adverse event reporting regulations, and similar foreign rules and regulations. Despite our training and compliance programs, our internal control policies and procedures may not always protect us from negligent, reckless or criminal acts committed by our employees or agents. The failure to comply with these laws and regulatory standards, allegations of such non-compliance or the discovery of previously unknown problems

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with a product or manufacturer: (i) could result in FDA Form-483 notices and/or warning letters or the foreign equivalent, fines, delays or suspensions of regulatory clearances, investigations, detainment, seizures or recalls of products (with the attendant expenses), the banning of a particular device, an order to replace or refund the cost of any device previously manufactured or distributed, operating restrictions and/or civil or criminal prosecution, and/or penalties, as well as decreased sales as a result of negative publicity and product liability claims; and (ii) could disrupt our business and could have a material adverse effect on our business, results of operations, financial condition and/or liquidity.

Most of our products must receive clearance or approval from the FDA or comparable regulatory agencies abroad before they can be marketed or sold. State, federal and foreign registration regulations are both evolving and subject to varied levels of interpretation and enforcement. It can be costly and time-consuming to obtain and maintain regulatory approvals to market a medical device. Approvals might not be granted on a timely basis, if at all, for new devices, new indications for use or certain modifications or enhancements to previously approved products. Even after a device receives regulatory approval it remains subject to significant regulatory and quality requirements, such as manufacturing, recordkeeping, renewal, recertification or reporting and other post market approval requirements, which may include clinical, laboratory or other studies. Product approvals by the FDA and other foreign regulators can be withdrawn due to failure to comply with regulatory standards or the occurrence of unforeseen problems following initial approval or may be re-classified to a higher regulatory classification, such as requiring a Pre-Market Approval (“PMA”) for a previously cleared 510(k) device. Regulations are also subject to change as a result of legislative, administrative or judicial action, which may further increase our costs or reduce sales. Our failure to maintain approvals, obtain approval for new products or comply with other applicable regulatory requirements could adversely affect our business, results of operations, financial condition and/or liquidity.

The healthcare industry is under continued scrutiny from state, federal and international governments with respect to industry practices in the area of sales and marketing, including provisions of the Physician Payment Sunshine Act. If our marketing, sales or other activities fail to comply with the FDA’s or other comparable foreign regulatory agencies’ regulations or guidelines, or other applicable laws, we may be subject to warnings from the FDA or investigations or enforcement actions from the FDA, Medicare, the Office of Inspector General of the U.S. Department of Health and Human Services or other government agencies or enforcement bodies. Additionally, in the European Union, a new draft Medical Device Regulation was published in 2016 imposing stricter requirements for the marketing and sale of medical devices and grants Notified Bodies increased post-market surveillance authority. The Company is monitoring the implementation of the regulation and has undertaken initial actions to move toward compliance based on the published draft of the regulation. The Company’s failure to comply with any marketing or sales regulations or any other applicable regulatory requirements could adversely affect our business, results of operations, financial condition and/or liquidity.

In the recent past, medical device manufacturers have been the subject of investigations from government agencies related to their relationships with doctors, product sales and marketing and off-label promotion of products, among other activities or practices. If an enforcement action involving the company were to occur, it could result in penalties, fines, detainment, seizures, recalls, product bans, operating restrictions (which may include loss of a license or authorization), the exclusion of our products from reimbursement under government-funded programs and/or prohibitions on our ability to sell our products, and could have a material adverse effect on our business, results of operations, financial condition and/or liquidity. In addition, remediation of any issues identified by the FDA or other regulators could require facility upgrades, process changes, additional labeling requirements or other measures, any of which could have a material adverse effect on our business and/or results of operations. See Item 3. “Legal Proceedings” below for a description of the subpoenas and Civil Investigation Demands from a number of State Attorneys General and investigative subpoena from the Department of Defense, in each case, seeking information related to certain of the company’s products.

In addition, lawsuits by or otherwise involving employees, customers, licensors, licensees, suppliers, vendors, business partners, distributors, shareholders or competitors with respect to how we conduct our business



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could be very costly and could substantially disrupt our business. Disputes from time-to-time with companies or individuals are not uncommon, and we cannot assure you that we will be able to resolve these disputes on terms favorable to us. See Item 3. “Legal Proceedings” below for a description of lawsuits against the company. The occurrence of an adverse monetary or equitable judgment or a large expenditure in connection with a settlement of any of these matters could have a material adverse effect on our business, results of operations, financial condition and/or liquidity.

***Failure to successfully implement, manage and/or integrate critical information systems, disruption of these systems or material breaches of the security of systems involved in our operations may adversely affect our business and customer relationships and/or results of operations.***

We rely on information technology systems and network infrastructure to process, transmit, and store electronic information in our day-to-day operations, including proprietary or confidential information. Our business also generates and/or maintains sensitive information, such as patient data and other personal information, which may include protected health information and personally identifiable information (collectively, “sensitive personal information”). We also rely on our and others’ technology infrastructure to, among other functions, interact with suppliers and vendors, sell our products, fulfill orders and bill, collect and make payments, ship products and provide support to customers, track customer purchases, fulfill contractual obligations, store data and otherwise conduct business. During 2016, we began (and are continuing our efforts towards) outsourcing significant information technology functions and services to third parties, including significant elements of our information technology infrastructure, and as a result we are managing relationships with third parties who have access to our proprietary, confidential or sensitive personal information. The size and complexity of our information technology systems and those of our third party vendors may make such systems potentially vulnerable to service interruptions or attack. Our internal information technology systems, as well as those systems maintained by third-party providers, may be subjected to computer viruses or other malicious codes, unauthorized access attempts, service interruptions, and cyber-attacks, including infiltration of data centers, any of which, if successful, could result in data leaks or otherwise compromise our proprietary, confidential or sensitive personal information and disrupt our operations. The size and complexity of our third-party vendors’ systems and the large amounts of proprietary, confidential or sensitive personal information that is present at their sites also makes them potentially vulnerable to security breaches from inadvertent or intentional actions by our employees, partners or vendors, or from attacks by malicious third parties. We cannot assure you that our vendors, customers and other third parties that we conduct business with will maintain appropriate policies and procedures regarding data privacy and security. Cyber-attacks continue to increase in sophistication and frequency. Additionally our systems and network infrastructure are vulnerable to interruption due to fire, power loss, system malfunctions and the level of protection and disaster recover capability varies from site to site and across facilities maintained by third-party vendors. While we have invested in our systems and the protection of our data (including through outsourcing certain functions and services to third-party vendors, network monitoring, preventive security controls, employee training and security policies) to reduce the risk of an intrusion or interruption and monitor such systems on an ongoing basis for any current or potential threats, there can be no assurances that the protective measures will prevent attacks or future security breaches that could have a significant impact on our business, reputation, results of operations, financial condition and/or liquidity.

In addition, our information systems and those of our third-party providers require an ongoing commitment of significant resources to maintain, protect and enhance existing systems, and to develop new systems to keep pace with continuing changes in information technology, the evolving needs of our business, regulatory standards and the need to protect our and our customers’ proprietary, confidential or sensitive personal information. If we or our third-party providers fail to maintain or protect our information technology systems and data integrity effectively, fail to implement new systems and/or update or expand existing systems (such as the company’s ongoing effort to expand its Enterprise Resource Planning, or ERP, platform more broadly through the company) or fail to anticipate, plan for or manage significant disruptions to systems involved in our operations, we could lose existing customers, have difficulty preventing, detecting, and controlling fraud, have disputes with customers, suppliers, vendors, physicians, and other health care professionals, have regulatory sanctions or

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penalties imposed, be subject to civil or criminal investigations or suits resulting from a system breach, have increases in operating expenses, have difficulty manufacturing and distributing our products, incur expenses or lose revenues as a result of data breaches, have negative publicity or suffer other adverse consequences, any of which could have a material adverse effect on our business, reputation, results of operations, financial condition and/or liquidity.

***We are substantially dependent on patent and proprietary rights and incur significant costs maintaining, defending and protecting these rights. We also may face restrictions or additional costs in connection with the sale of our products.***

We operate in an industry characterized by extensive patent litigation. Patent litigation is generally expensive, complex and can result in significant damage awards (treble damages under certain circumstances), injunctions that could prevent the manufacture and sale of affected products, settlement payments or royalty payments to enable us to continue selling the products and may significantly divert the attention of our technical and management personnel. At any given time, we are generally involved as either a plaintiff or a defendant in a number of patent infringement actions, the outcomes of which may not be known for prolonged periods of time. While it is not possible to predict the outcome of patent litigation incident to our business, we believe that an adverse outcome associated with any pending litigation could generally have a material adverse effect on our business and/or results of operations.

We rely on a combination of patents, trade secrets, non-disclosure agreements and other intellectual property rights to protect our proprietary intellectual property and will continue to do so. Although these patents, trade secrets, non-disclosure agreements and other intellectual property rights may not successfully protect our intellectual property, we intend to defend against threats to our intellectual property. Our pending patent applications may not result in patents issuing to us, and patents issued to or licensed by us in the past or in the future may be challenged, invalidated or circumvented. Furthermore, legal standards with respect to the validity and scope of patents continues to evolve and therefore these patents may not be sufficiently broad to provide us with a competitive advantage. In addition, we operate in foreign markets where protection or enforcement of intellectual property rights may be weaker than in the United States, and inadequate patent protection in those markets may adversely affect our competitive position. Third parties could also obtain patents or other intellectual property rights that may require us to negotiate licenses with them to conduct our business, and we cannot assure you that the required licenses would be available on reasonable terms or at all.

We also attempt to protect our trade secrets, proprietary information and know-how and continuing technological innovation with security measures, including the use of information technology measures and non-disclosure and other agreements with our employees, consultants and collaborators. We cannot be certain that these agreements will not be breached, that we will have adequate remedies for any breach, that others will not independently develop substantially equivalent proprietary information, or that third parties will not otherwise gain access to our trade secrets or proprietary know-how.

Any inability to protect our intellectual property or obtain necessary licenses could have a material adverse effect on our business, results of operations and/or liquidity. For more information, see Item 3. "Legal Proceedings."

***Our international sales and operations are subject to risks and uncertainties that vary by country and which could have a material adverse effect on our business and/or results of operations.***

Sales outside the United States accounted for approximately 31% of our net sales in 2016. We anticipate that sales from international operations will continue to represent a significant portion of our total sales, and we intend to continue our expansion into emerging and/or faster-growing markets outside the United States. In addition, many of our manufacturing facilities and suppliers are located outside the United States. As a result, our sales and profitability from our international operations and our ability to implement our overall business strategy

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(including our plan to continue expanding into emerging and/or faster-growing markets outside the United States) are subject to risks and uncertainties that can vary by country, and include those related to political and economic conditions, foreign currency exchange rate fluctuations, enforcement of contractual obligations, ensuring appropriate quality assurance standards, changes to international trade agreements and treaties, local product preference and manufacturing requirements or other trade restrictions, changes in tax laws (including with respect to imports or borders), regulatory and reimbursement programs and policies, import or export licensing requirements and regulations, antitrust enforcement and the protection of intellectual property rights. These risks and uncertainties could have a material adverse effect on our business and/or results of operations.

The June 2016 referendum by British voters to exit the European Union (commonly known as “Brexit”) has created uncertainties affecting business operations in the United Kingdom and the European Union. Following the vote, there was significant decline in the value of the British pound compared to the U.S. dollar, and there may be continued volatility in exchange rates and economic conditions as the United Kingdom negotiates its exit from the European Union. Until the terms and timing of the United Kingdom’s exit from the European Union becomes clearer, it is difficult to predict its impact. It is possible that the referendum and proposed withdrawal could, among other things, affect the legal and regulatory schemes to which our business is subject, impact trade between the United Kingdom and the European Union and other parties and create uncertainty in the region.

### ***The adoption of healthcare reform in the United States may adversely affect our business and/or results of operations.***

In March 2010, significant reforms to the U.S. healthcare system were adopted in the form of the Patient Protection and Affordable Care Act (the “PPACA”). The PPACA includes provisions that, among other things, reduce and/or limit Medicare reimbursement, require all individuals to have health insurance (with limited exceptions) and impose new and/or increased taxes. Specifically, beginning in 2013, the medical device industry was required to subsidize healthcare reform in the form of a 2.3% excise tax on United States sales of most medical devices. This excise tax, which increased our operating expenses, was suspended in December 2015 for 2016 and 2017. The status of the excise tax for sales after December 31, 2017 is uncertain. The tax may continue to be suspended, repealed or may be reinstated at the same or different level. The PPACA also reduced Medicare and Medicaid payments to hospitals and clinical laboratories, which could reduce medical procedure volumes and impact the demand for our products or the prices at which the company sells its products. While the PPACA is intended to expand health insurance coverage to uninsured persons in the United States, other elements of this legislation, such as Medicare provisions aimed at improving quality and decreasing costs, comparative effectiveness research, an independent payment advisory board, and pilot programs to evaluate alternative payment methodologies, make it difficult to determine the overall impact on sales of our products.

It is possible that changes in administration and policy, including the potential repeal of all or parts of the PPACA could result in additional proposals and/or changes to health care system legislation which could have a material adverse effect on our business and/or results of operations. The full effect that a full or partial repeal of the PPACA would have on our business remains unclear.

Various healthcare reform proposals have also emerged at the state level and in other jurisdictions where we sell our products. The impact of the PPACA (or its full or partial repeal) and these proposals could have a material adverse effect on our business and/or results of operations.

### ***Regulations related to “conflict minerals” may impact our supply chain, increase the cost of certain metals used in manufacturing our products and/or cause us to incur additional expenses.***

Under the Dodd-Frank Wall Street Reform and Consumer Protection Act, companies registered with the SEC are required to determine the sources of any tantalum, tin, and tungsten (or their ores) and gold (referred to as “conflict minerals”), used in their products and to disclose whether or not the specified minerals originated from the Democratic Republic of the Congo and adjoining countries (“Covered Countries”) and the procedures

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employed to make such determinations. We have determined that certain of our products contain conflict minerals and we have developed a process to identify where such mineral originated. As of the date of our conflict minerals report for the 2015 calendar year, we were unable to determine whether or not such minerals contained in our products originate from a Covered Country. We have incurred and will continue to incur additional costs associated with complying with the diligence and disclosure requirements, and there may be costs associated with remediation and other changes to our products, processes, or sources of supply as a consequence of such verification activities. These rules could adversely affect the sourcing, supply, and pricing of materials used in our products. We cannot be sure that we will be able to obtain the necessary information on conflict minerals from our suppliers or that we will be able to determine that all of our products are conflict free. As a result, we may face reputational challenges if we determine that certain of our products contain minerals not determined to be conflict free or if we are unable to sufficiently verify the origins for all conflict minerals used in our products through the procedures we implement. In addition, we may encounter challenges satisfying customers who require that all of the components of our products be certified as conflict free.

### ***Economic conditions and/or instability could adversely affect the company.***

Financial markets and the economies in the United States and internationally may experience change, disruption and volatility, including the economic impacts resulting from foreign exchange movements. In addition, conditions could worsen in countries that have experienced or are currently experiencing such disruptions or volatility. As a result, the economic environment may, among other things:

- create downward pressure on the pricing of our products;
- affect the collection of accounts receivable;
- increase the sales cycle for certain of our products;
- slow the adoption of new technology;
- adversely affect the company's effective income tax rate;
- adversely affect our customers, causing them to reduce spending and/or decrease utilization of our products; and
- adversely affect our suppliers, which could disrupt our ability to produce our products.

These conditions may develop or continue in the future. Any of these conditions could have a material adverse effect on our business, results of operations, financial condition and/or liquidity. See Note 6 of the notes to consolidated financial statements.

### ***We need to attract and retain key employees to be competitive.***

Our ability to compete effectively depends upon our ability to attract and retain executives and other key employees, including people in technical, information technology, marketing, sales and research positions. Competition for experienced employees, particularly for persons with specialized skills, can be intense. Our ability to recruit such talent will depend on a number of factors, including compensation and benefits, work location and work environment. If we cannot effectively recruit and retain qualified executives and employees, our business could be adversely affected.

### ***Item 1B. Unresolved Staff Comments***

None.

### ***Item 2. Properties***

The executive offices of the company are located in Murray Hill, New Jersey. Domestic manufacturing and development units are located in Arizona, California, Colorado, Florida, Georgia, Illinois, Massachusetts,

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Minnesota, Montana, New Jersey, New York, Ohio, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, Tennessee, Texas and Utah. Sales offices are in many of these locations as well as others. Outside the United States, the company has plants or offices in Austria, Australia, Belgium, Brazil, Canada, Chile, China, Colombia, the Czech Republic, Finland, France, Germany, Greece, India, Ireland, Italy, Japan, Korea, Malaysia, Mexico, the Netherlands, Poland, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, the United Arab Emirates and the United Kingdom.

The company owns approximately 2.9 million square feet of space in 24 locations and leases approximately 1.7 million square feet of space in 103 locations. All of these facilities are well-maintained and suitable for the operations conducted in them.

### ***Item 3. Legal Proceedings***

In the ordinary course of business, the company is subject to various legal proceedings, investigations and claims, including, for example, environmental matters, employment disputes, disputes on agreements and other commercial disputes. In addition, the company operates in an industry susceptible to significant product liability and patent legal claims. At any given time, in the ordinary course of business, the company is involved as either a plaintiff or defendant in a number of patent infringement actions. If a third party's patent infringement claim were to be determined against the company, the company might be required to make significant royalty or other payments or might be subject to an injunction or other limitation on its ability to manufacture or distribute one or more products. If a patent owned by or licensed to the company is found to be invalid or unenforceable, the company might be required to reduce the value of certain intangible assets on the company's balance sheet and to record a corresponding charge, which could be significant in amount. Many of the company's legal proceedings and claims could have a material adverse effect on its business, results of operations, financial condition and/or liquidity.

#### *Product Liability Matters*

##### Hernia Product Claims

As of December 31, 2016, approximately 25 federal and 65 state lawsuits involving individual claims by approximately 90 plaintiffs, as well as one putative class action in the United States, are currently pending against the company with respect to its Composix® Kugel® and certain other hernia repair implant products (collectively, the "Hernia Product Claims"). The company voluntarily recalled certain sizes and lots of the Composix® Kugel® products beginning in December 2005. In June 2007, the Composix® Kugel® lawsuits and, subsequently, other hernia repair product lawsuits, pending in federal courts nationwide were transferred into one Multidistrict Litigation ("MDL") for coordinated pre-trial proceedings in the United States District Court for the District of Rhode Island. The MDL stopped accepting new cases in the second quarter of 2014 and was terminated in November 2016, at which time the remaining federal lawsuits were remanded to their courts of original jurisdiction for trial. As of December 31, 2016, all but one of the putative class actions pending against the company was dismissed. The remaining putative class action pending against the company has not been certified and seeks: (i) medical monitoring; (ii) compensatory damages; (iii) punitive damages; (iv) a judicial finding of defect and causation; and/or (v) attorneys' fees. In April 2014, a settlement was reached with respect to the three putative Canadian class actions within amounts previously recorded by the company. Approximately 50 of the state lawsuits, involving individual claims by approximately 50 plaintiffs, are pending in the Superior Court of the State of Rhode Island, with the remainder in various other jurisdictions. The Hernia Product Claims also generally seek damages for personal injury resulting from use of the products.

The company has resolved the majority of its historical Hernia Product Claims, including through agreements or agreements in principle with various plaintiffs' law firms to settle their respective inventories of cases. Each agreement involving the settlement of a firm's inventory of claims was subject to certain conditions, including requirements for participation in the proposed settlements by a certain minimum number of plaintiffs.

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In addition, the company continues to engage in discussions with other plaintiffs' law firms regarding potential resolution of unsettled Hernia Product Claims, and intends to vigorously defend Hernia Product Claims that do not settle, including through litigation. The company expects additional trials of Hernia Product Claims to take place over the next 12 months. The company cannot give any assurances that the resolution of the Hernia Product Claims that have not settled, including asserted and unasserted claims and the putative class action lawsuit, will not have a material adverse effect on the company's business, results of operations, financial condition and/or liquidity.

### Women's Health Product Claims

As of December 31, 2016, product liability lawsuits involving individual claims by approximately 6,235 plaintiffs are currently pending against the company in various federal and state jurisdictions alleging personal injuries associated with the use of certain of the company's surgical continence products for women, which includes products manufactured by both the company and two subsidiaries of Medtronic plc (as successor in interest to Covidien plc) ("Medtronic"), each a supplier of the company. Medtronic has an obligation to defend and indemnify the company with respect to any product defect liability for products its subsidiaries had manufactured. As described below, in July 2015 the company reached an agreement with Medtronic regarding certain aspects of Medtronic's indemnification obligation. In addition, five putative class actions in the United States and five putative class actions in Canada have been filed against the company, and a limited number of other claims have been filed or asserted in various non-U.S. jurisdictions. The foregoing lawsuits, unfiled or unknown claims, putative class actions and other claims, together with claims that have settled or are the subject of agreements or agreements in principle to settle, are referred to collectively as the "Women's Health Product Claims". The Women's Health Product Claims generally seek damages for personal injury resulting from use of the products. The putative class actions, none of which has been certified, seek: (i) medical monitoring; (ii) compensatory damages; (iii) punitive damages; (iv) a judicial finding of defect and causation; and/or (v) attorneys' fees. In April 2015, the Ontario Superior Court of Justice dismissed the plaintiffs' motion for class certification in one Canadian putative class action. In March 2016, the company reached an agreement in principle to resolve all Canadian putative class actions, with the exception of a Quebec class action, within amounts previously recorded by the company, which settlement was finalized in September 2016. In January 2017, the court approved the discontinuance of the proposed Quebec class action.

In October 2010, the Women's Health Product Claims involving solely Avaulta® products pending in federal courts nationwide were transferred into an MDL in the United States District Court for the Southern District of West Virginia (the "WV District Court"), the scope of which was later expanded to include lawsuits involving all women's surgical continence products that are manufactured or distributed by the company. The first trial in a state court was completed in California in July 2012 and resulted in a judgment against the company of approximately \$3.6 million. On appeal the decision was affirmed by the appellate court in November 2014. The company filed a petition for review to the California Supreme Court on December 24, 2014, which was denied on February 18, 2015. The judgment in this matter, including interest and costs, was paid on March 20, 2015 within the amounts previously recorded by the company. The first trial in the MDL commenced in July 2013 and resulted in a judgment against the company of approximately \$2 million, which was upheld by the Fourth Circuit on January 14, 2016. The company does not believe that any verdicts entered to date are representative of potential outcomes of all Women's Health Product Claims. On January 16, 2014 and July 31, 2014, the WV District Court ordered that the company prepare 200 and then an additional 300 individual cases, respectively, for trial (the "2014 WHP Pre-Trial Orders") (the timing for which is currently unknown). The 2014 WHP Pre-Trial Orders resulted in significant additional litigation-related defense costs beginning in the second quarter of 2014 and continuing through the second quarter of 2015. In February 2015, the WV District Court appointed a Special Master to assist with settlement resolution. In June 2015, the WV District Court issued an order staying the requirement to prepare a significant portion of the cases covered by the 2014 WHP Pre-Trial Orders. Substantially all of the 500 individual cases that are the subject of the 2014 WHP Pre-Trial Orders have been part of agreements or agreements in principle to settle with various plaintiff law firms. In December 2016, the WV District Court lifted the stay of the 2014 WHP Pre-Trial Orders and remanded five of the unsettled cases

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to their courts of original jurisdiction for trial. In response to a January 27, 2017 court order, the company is required to prepare an additional approximately 243 individual cases for trial (together with the 2014 WHP Pre-Trial Orders, the “WHP Pre-Trial Orders”). The WHP Pre-Trial Orders may result in material additional cost in future periods in defending Women’s Health Product Claims. The WV District Court may also order that the company prepare additional cases for trial, which could result in material additional costs in future periods.

As of December 31, 2016, the company reached agreements or agreements in principle with various plaintiffs’ law firms to settle their respective inventories of cases totaling approximately 11,000 Women’s Health Product Claims, including approximately: 560 during 2014, 6,285 during 2015 and 4,155 during 2016. The company believes that these Women’s Health Product Claims are not the subject of Medtronic’s indemnification obligation. These settlement agreements and agreements in principle include unfiled and previously unknown claims held by various plaintiffs’ law firms, which have not been included in the approximate number of lawsuits set forth in the first paragraph of this section. Each agreement is subject to certain conditions, including requirements for participation in the proposed settlements by a certain minimum number of plaintiffs. The company continues to engage in discussions with other plaintiffs’ law firms regarding potential resolution of unsettled Women’s Health Product Claims, which may include additional inventory settlements. Notwithstanding these settlement efforts, the company anticipates additional trials over the next 12 months. In addition, one or more possible consolidated trials may occur in the future.

In July 2015, as part of the agreement noted above, Medtronic agreed to take responsibility for pursuing settlement of certain of the Women’s Health Product Claims that relate to products distributed by the company under supply agreements with Medtronic and the company has paid Medtronic \$121 million towards these potential settlements. The company also may, in its sole discretion, transfer responsibility for settlement of additional Women’s Health Product Claims to Medtronic on similar terms. The agreement does not resolve the dispute between the company and Medtronic with respect to Women’s Health Product Claims that do not settle, if any. As part of the agreement, Medtronic and the company agreed to dismiss without prejudice their previously filed litigation with respect to Medtronic’s obligation to defend and indemnify the company.

The approximate number of lawsuits set forth in the first paragraph of this section does not include approximately 600 generic complaints involving women’s health products where the company cannot, based on the allegations in the complaints, determine whether any of those cases involve the company’s women’s health products. In addition, the approximate number of lawsuits set forth in the first paragraph of this section does not include approximately 830 claims that have been threatened against the company but for which complaints have not yet been filed. In addition, the company has limited information regarding the nature and quantity of these and other unfiled or unknown claims. During the course of engaging in settlement discussions with plaintiffs’ law firms, the company has learned, and may in future periods learn, additional information regarding these and other unfiled or unknown claims, or other lawsuits, which could materially impact the company’s estimate of the number of claims or lawsuits against the company. While the company continues to engage in discussions with other plaintiffs’ law firms regarding potential resolution of unsettled Women’s Health Product Claims and intends to vigorously defend the Women’s Health Product Claims that do not settle, including through litigation, it cannot give any assurances that the resolution of these claims will not have a material adverse effect on the company’s business, results of operations, financial condition and/or liquidity.

### Filter Product Claims

As of December 31, 2016, product liability lawsuits involving individual claims by approximately 1,425 plaintiffs are currently pending against the company in various federal and state jurisdictions alleging personal injuries associated with the use of the company’s vena cava filter products (all lawsuits, collectively, the “Filter Product Claims”). In August 2015, the Judicial Panel for Multi-District Litigation (“JPML”) ordered the creation of a Multi-District Litigation for all federal Filter Product Claims (the “IVC Filter MDL”) in the District of Arizona. There are approximately 1,375 Filter Product Claims that have been, or shortly will be, transferred to the IVC Filter MDL, including one medical monitoring class action. The remaining approximately 50 Filter

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Product Claims are pending in various state courts. In March 2016, a putative Canadian class action was filed against the company in Quebec. In April 2016 and May 2016, putative Canadian class actions were filed in Ontario and British Columbia, respectively. In November 2016, a putative Canadian class action was filed in Saskatchewan. The approximate number of lawsuits set forth above does not include approximately 25 claims that have been threatened against the company but for which complaints have not yet been filed. In addition, the company has limited information regarding the nature and quantity of these and other unfiled or unknown claims. The company continues to receive claims and lawsuits and may in future periods learn additional information regarding other unfiled or unknown claims, or other lawsuits, which could materially impact the company's estimate of the number of claims or lawsuits against the company. The company expects that trials of Filter Product Claims may take place over the next 12 months. While the company intends to vigorously defend Filter Product Claims that do not settle, including through litigation, it cannot give any assurances that the resolution of these claims will not have a material adverse effect on the company's business, results of operations, financial condition and/or liquidity.

### General

In most product liability litigations (like those described above), plaintiffs allege a wide variety of claims, ranging from allegations of serious injury caused by the products to efforts to obtain compensation notwithstanding the absence of any injury. In many of these cases, the company has not yet received and reviewed complete information regarding the plaintiffs and their medical conditions and, consequently, is unable to fully evaluate the claims. The company expects that it will receive and review additional information regarding any remaining unsettled product liability matters.

The company believes that some settlements and judgments, as well as some legal defense costs, relating to product liability matters are or may be covered in whole or in part under its product liability insurance policies with a limited number of insurance carriers, or, in some circumstances, indemnification obligations to the company from other parties, which if disputed, the company intends to vigorously contest. Amounts recovered under the company's product liability insurance policies or indemnification arrangements may be less than the stated coverage limits or less than otherwise expected and may not be adequate to cover damages and/or costs relating to claims. In addition, there is no guarantee that insurers or other parties will pay claims or that coverage or indemnity will be otherwise available.

In January 2017, the company reached an agreement to resolve litigation filed in the Southern District of New York by its insurance carriers in connection with Women's Health Product Claims and Filter Product Claims. The agreement requires the insurance carriers to reimburse the company for certain future costs incurred in connection with Filter Product Claims up to an agreed amount. For certain product liability claims or lawsuits, the company does not maintain or has limited remaining insurance coverage.

### *Other Legal Matters*

Since early 2013, the company has received subpoenas or Civil Investigative Demands from a number of State Attorneys General seeking information related to the sales and marketing of certain of the company's products that are the subject of the Hemia Product Claims and the Women's Health Product Claims. The company is cooperating with these requests. Although the company has had discussions with the State Attorneys General with respect to overall potential resolution of this matter, there can be no assurance that a resolution will be reached or what the terms of any such resolution may be. Since it is not feasible to predict the outcome of these proceedings, the company cannot give any assurances that the resolution of these proceedings will not have a material adverse effect on the company's business, results of operations, financial condition and/or liquidity.

In November 2015, the Department of Defense Inspector General issued an investigative subpoena to the company. The Department of Health and Human Services is also participating in this investigation. The subpoena seeks documents related to the company's sales and marketing of certain filter products, drug coated balloon



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catheters, and peripheral arterial disease detection products. The company is cooperating with these requests. Since it is not feasible to predict the outcome of these proceedings, the company cannot give any assurances that the resolution of these proceedings will not have a material adverse effect on the company's business, results of operations, financial condition and/or liquidity.

In June 2011, Gore filed suit in the U.S. District Court in Delaware alleging the company had infringed several of Gore's patents. Fact and expert discovery have been completed. In December 2015, the Delaware District Court granted the company's summary judgment motion of no willful infringement. However, that decision was vacated in June 2016 due to a United States Supreme Court ruling that changed the test for willful infringement historically applied by the lower courts. In July 2016, the company's summary judgment motion of laches (undue delay) was denied, at least in part because of the currently pending Supreme Court case on this issue, which was heard during the Fall 2016 term. Previously, the company filed a motion to dismiss a significant portion of Gore's damages claim on the grounds that Gore lacks proper standing. This motion was converted to a motion for summary judgment and was granted in July 2016, effectively reducing the amount of potential damages. The trial has been set for March 2017. The company intends to vigorously defend the allegations asserted by Gore. The company cannot give any assurances that an adverse resolution of this matter will not have a material adverse effect on the company's business, results of operations, financial condition and/or liquidity.

The company is subject to numerous federal, state, local and foreign environmental protection laws governing, among other things, the generation, storage, use and transportation of hazardous materials and emissions or discharges into the ground, air or water. The company is or may become a party to proceedings brought under various federal laws including the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly known as Superfund, the Resource Conservation and Recovery Act, the Clean Water Act, the Clean Air Act and similar state or foreign laws. These proceedings seek to require the owners or operators of contaminated sites, transporters of hazardous materials to the sites and generators of hazardous materials disposed of at the sites to clean up the sites or to reimburse the government for cleanup costs. In most cases, there are other potentially responsible parties that may be liable for remediation costs. In these cases, the government alleges that the defendants are jointly and severally liable for the cleanup costs; however, these proceedings are frequently resolved so that the allocation of cleanup costs among the parties more closely reflects the relative contributions of the parties to the site contamination. The company's potential liability varies greatly from site to site. For some sites, the potential liability is de minimis and for others the costs of cleanup have not yet been determined. Accruals for estimated losses from environmental remediation obligations generally are recognized no later than completion of the remedial feasibility study and are adjusted as further information develops or circumstances change. Costs of future expenditures for environmental remediation obligations are not discounted to their present value. Recoveries of environmental remediation costs from other parties are recorded as assets when their receipt is deemed probable. The company believes that the proceedings and claims described above will likely be resolved over an extended period of time. While it is not feasible to predict the outcome of these proceedings, based upon the company's experience, current information and applicable law, the company does not expect these proceedings to have a material adverse effect on its financial condition and/or liquidity. However, one or more of the proceedings could be material to the company's business and/or results of operations.

### *Litigation Reserves*

The company regularly monitors and evaluates the status of product liability and other legal matters, and may, from time-to-time, engage in settlement and mediation discussions taking into consideration developments in the matters and the risks and uncertainties surrounding litigation. These discussions could result in settlements of one or more of these claims at any time. See Note 10 of the notes to consolidated financial statements.

### ***Item 4. Mine Safety Disclosures***

Not applicable.

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### **Executive Officers of the Registrant**

Set forth below is the name, age, position, five-year business history and other information with respect to each executive officer of the company as of February 13, 2017. No family relationships exist among the officers or Board of Directors of the company. The Board of Directors elects all officers of the company annually.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Timothy M. Ring	59	Chairman and Chief Executive Officer and Director
John H. Weiland	61	Vice Chairman, President and Chief Operating Officer and Director
Christopher S. Holland	50	Senior Vice President and Chief Financial Officer
Jim C. Beasley	53	Group President
Timothy P. Collins	56	Group President
John P. Groetelaars	50	Group President
Sharon M. Luboff	54	Group Vice President
John A. DeFord	55	Senior Vice President-Science, Technology and Clinical Affairs
Samrat S. Khichi	49	Senior Vice President, General Counsel and Secretary
Betty D. Larson	41	Vice President-Human Resources
Frank Lupisella Jr.	56	Vice President and Controller
Gerard D. Porreca III	53	Vice President-Quality, Regulatory and Medical Affairs

Timothy M. Ring joined Bard in 1992 as Vice President, Human Resources after 10 years with Abbott Laboratories, Inc. In 1993, Mr. Ring was promoted to Group Vice President, International Operations. He later assumed responsibility for Bard's Interventional Cardiology and Electrophysiology divisions, as well as Bard's Cardiac Assist and Cardiopulmonary divisions. In 1997, Mr. Ring was promoted to Group President for Coronary Vascular Products. In 1999, he was named Group President with oversight for Bard's Corporate Healthcare Services, Peripheral Vascular, Access Systems and Electrophysiology divisions, as well as Bard's businesses in Europe, the Middle East and Africa. Mr. Ring was elected Chairman and Chief Executive Officer in 2003.

John H. Weiland joined Bard in 1996 as Group Vice President. He was promoted to Group President in 1997. From 1997 until 2003, Mr. Weiland had numerous responsibilities including for Bard's Davol, Urological, Medical and Endoscopic Technologies divisions, as well as responsibility for Bard's businesses in Japan, Latin and Central America, Canada and Asia Pacific, and for Bard's worldwide manufacturing operations. Mr. Weiland previously served as Senior Vice President of North American Operations for Dentsply International, President and Chief Executive Officer of Pharmacia Diagnostics, Inc. and was with American Hospital Supply and Baxter Healthcare. He served one year as a White House Fellow in the role of Special Assistant to the Director of the Office of Management and Budget as well as Special Assistant to the Secretary of Interior. Mr. Weiland was elected to the position of President and Chief Operating Officer in 2003 and to the Board of Directors in 2005. Mr. Weiland was appointed Vice Chairman in 2016.

Christopher S. Holland joined Bard in 2012 as Senior Vice President and Chief Financial Officer. From July 2013 through June 2015, Mr. Holland had responsibility for Bard Medical division. In July 2015, Mr. Holland assumed responsibilities for Business Development, Corporate Marketing, Reimbursement, Healthcare Economics and Strategy. Prior to joining Bard, he held executive positions at ARAMARK Corporation since 2003 and was most recently Senior Vice President, Finance and Treasurer. Previously, Mr. Holland held various positions at J.P. Morgan and Company, Inc., including Vice President, with responsibility for the medical device sector.

Jim C. Beasley joined Bard in 1989 as a territory sales manager for Bard Interventional Products. He has held a succession of management positions including President of Bard Access Systems division from 2003 to 2007 and President of Bard Peripheral Vascular division from 2007 to 2012. In 2009, Mr. Beasley was promoted to Group Vice President and assumed responsibility for both divisions. From January 2012 to July 2013, Mr. Beasley also had responsibilities for Bard's businesses in Japan, Asia (excluding China) and Australia. In

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July 2013, Mr. Beasley was promoted to Group President and assumed responsibilities for Bard's businesses in Latin America while continuing to be responsible for the Bard Access Systems (through June 2015) and Bard Peripheral Vascular divisions, and Bard's business in Japan. In July 2015, Mr. Beasley assumed additional responsibilities for driving a new market development process across Bard to enable and accelerate the company's growth in new and developing markets.

Timothy P. Collins joined Bard in 1986 as a facilities planner with the USCI division. Over the next 12 years, he held positions of increasing responsibility including Director of Operations for Diagnostic Cardiology. Concurrent with the sale of Bard's cardiology business, Mr. Collins joined Medtronic Vascular in 1998 as Vice President/Business Unit Manager in Medtronic/AVE and was later appointed Vice President, Global Operations, Vascular. Mr. Collins returned to Bard and was President of the Bard Electrophysiology division from 2003 to 2008. In 2008, Mr. Collins was promoted to Group Vice President responsible for worldwide manufacturing operations and also assumed responsibility for the Electrophysiology division, until its sale in November 2013. In January 2012, Mr. Collins assumed additional responsibility for Bard's businesses in Canada. In July 2013, Mr. Collins was promoted to Group President and assumed additional responsibility for Bard's businesses in Europe. In July 2015, Mr. Collins assumed additional responsibilities for Bard Medical division.

John P. Groetelaars joined Bard in 2008 as Vice President and General Manager of the Davol division. Mr. Groetelaars was President of the Davol division from 2009 to 2013. In July 2013, Mr. Groetelaars was promoted to Group Vice President and assumed additional responsibilities for Bard's businesses in China, Asia and Australia while continuing to be responsible for Bard's Davol division. In July 2015, Mr. Groetelaars was promoted to Group President and added Bard Access Systems to his current responsibilities. Prior to joining Bard, he held positions of increasing responsibility with Boston Scientific Corporation from 2001 until joining Bard and having most recently served as General Manager and Vice President for UK, Ireland and Nordic Regions.

Sharon M. Luboff joined Bard in 2004 as President of Bard Medical division. Ms. Luboff was promoted to Group Vice President and was responsible for Bard's international businesses from 2009 to 2013 and for Bard Medical division from 2012 to 2013. In July 2013, Ms. Luboff assumed responsibility for Corporate Marketing, Reimbursement, Healthcare Economics and Business Development and Strategy. Prior to joining Bard, Ms. Luboff held positions at Baxter Healthcare including Vice President, Global Therapeutic Marketing for its Renal Division.

John A. DeFord, Ph.D., joined Bard in 2004 as Vice President, Science & Technology after serving as Managing Director with Early Stage Partners, LLP (ESP), a venture capital fund, from 2002 until 2004. Before joining ESP he was President and CEO of Cook Incorporated, a privately-held medical device company. He was promoted to Senior Vice President-Science, Technology & Clinical Affairs in 2007.

Samrat S. Khichi joined Bard in July 2014 as Senior Vice President, General Counsel and Secretary. Prior to joining Bard, Mr. Khichi was Chief Administrative Officer, Senior Vice President, General Counsel and Secretary at Catalent Pharma Solutions, Inc, a portfolio company of The Blackstone Group, since 2007. Previously, Mr. Khichi served as Counsel, Mergers and Acquisition and Private Equity for O'Melveny & Myers LLP.

Betty D. Larson joined Bard in September 2014 as Vice President, Human Resources. Prior to joining Bard, Ms. Larson held positions of increasing responsibility with Baxter Healthcare Corporation from 1999 until joining Bard and having most recently served as Vice President, Human Resources – Global Medical Products Business.

Frank Lupisella Jr. joined Bard in 1987 and has served in various capacities in the finance organization of the company. Mr. Lupisella served as Vice President and Controller of the Davol division from 1999 until 2005 when he was promoted to Assistant Corporate Controller, Manufacturing Operations. In 2006, he was promoted to his present position of Vice President and Controller of the company.

Gerard D. Porreca III joined Bard in July 2016 as Vice President, Quality, Regulatory and Medical Affairs. Prior to joining Bard, Mr. Porreca was Senior Vice President, Global Regulatory Affairs and Quality Assurance and Chief RA/QA Officer at Smith and Nephew PLC since 2011.

**PART II**

**Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**

**Market and Market Prices of Common Stock**

The company’s common stock is listed on the New York Stock Exchange under the symbol BCR. The following table illustrates the high and low composite sale prices as reported on the New York Stock Exchange for each quarter during the last two years.

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
<b>2016</b>				
High	\$203.80	\$235.16	\$239.43	\$227.97
Low	\$172.21	\$201.55	\$212.29	\$203.63
<b>2015</b>				
High	\$180.35	\$180.94	\$202.47	\$196.98
Low	\$163.08	\$163.81	\$169.09	\$177.13

Title of Class	Number of record holders of the company’s common stock as of January 31, 2017
Common Stock - \$.25 par value	2,857

**Dividends**

The company paid cash dividends of \$74.6 million, or \$1.00 per share, in 2016 and \$69.4 million, or \$0.92 per share, in 2015. The following table illustrates the dividends paid per share in each of the indicated quarters.

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Year
2016	\$0.24	\$ 0.24	\$ 0.26	\$ 0.26	\$1.00
2015	\$0.22	\$ 0.22	\$ 0.24	\$ 0.24	\$0.92

The first quarter 2017 dividend of \$0.26 per share was declared on December 14, 2016 and was paid on February 3, 2017 to shareholders of record on January 23, 2017.

**Issuer Purchases of Equity Securities**

The following table provides information with respect to the shares of the company’s common stock repurchased during the quarter ended December 31, 2016.

	Issuer Purchases of Equity Securities			
	Total Number of Shares Purchased <sup>(1)(2)</sup>	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs <sup>(2)</sup>	Maximum Approximate Dollar Value of Shares that May Yet Be Purchased Under Plans or Programs <sup>(2)</sup>
October 1 - October 31, 2016	1,984	\$222.46	—	\$664,610,207
November 1 - November 30, 2016	130,430	213.05	130,301	636,849,229
December 1 - December 31, 2016	713,391	216.83	679,695	489,508,538
Total	845,805	\$216.26	809,996	\$489,508,538

(1) Includes 35,809 shares that the company repurchased during the three-month period ended December 31, 2016 that were not part of the publicly announced share repurchase authorization. These shares were purchased from employees to satisfy tax withholding requirements on the vesting of restricted shares/units from equity-based awards.

(2) On June 10, 2015, the company announced that its Board of Directors had authorized the repurchase of up to an additional \$500 million of common stock. On June 8, 2016, the company announced that its Board of Directors had authorized the repurchase of up to an additional \$500 million of common stock.

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**Item 6. Selected Financial Data**

Set forth below is selected financial data as of the end of and for each of the years ended December 31.

	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
(dollars and shares in thousands except per share amounts)					
<b>Income Statement Data</b>					
Net sales <sup>(A)</sup>	\$3,714,000	\$3,416,000	\$3,323,600	\$3,049,500	\$2,958,100
Net income <sup>(A)(B)(C)(D)(F)</sup>	531,400	135,400	294,500	689,800	530,100
<b>Balance Sheet Data</b>					
Total assets <sup>(B)(E)(F)</sup>	\$5,306,100	\$4,844,000	\$5,009,400	\$4,971,000	\$4,130,000
Working capital <sup>(B)(E)</sup>	1,207,500	708,600	1,339,200	1,425,700	1,357,000
Long-term debt <sup>(C)(E)</sup>	1,641,700	1,144,100	1,396,700	1,398,900	1,401,000
Total debt <sup>(C)(E)</sup>	1,641,700	1,394,300	1,474,700	1,398,900	1,401,000
Shareholders' investment <sup>(A)(B)(C)(D)(F)</sup>	1,675,100	1,455,300	1,804,900	2,088,200	1,925,700
<b>Common Stock Data</b>					
Basic earnings per share available to common shareholders <sup>(A)(B)(C)(D)(F)</sup>	\$ 7.15	\$ 1.80	\$ 3.83	\$ 8.54	\$ 6.24
Diluted earnings per share available to common shareholders <sup>(A)(B)(C)(D)(F)</sup>	7.03	1.77	3.76	8.39	6.16
Cash dividends paid per share	1.00	0.92	0.86	0.82	0.78
Shareholders' investment per share <sup>(A)(B)(C)(D)(F)</sup>	22.64	19.64	23.87	26.33	23.12
Weighted average common shares outstanding	74,000	74,100	75,600	79,300	83,300
Shareholders of record	2,875	3,044	3,266	3,393	3,596
<b>Supplementary Data</b>					
Return on shareholders' investment <sup>(A)(B)(C)(D)(E)(F)</sup>	34.0%	8.3%	15.1%	34.4%	28.7%
Net income/net sales <sup>(A)(B)(C)(D)(F)</sup>	14.3%	4.0%	8.9%	22.6%	17.9%
Total debt/total capitalization <sup>(A)(B)(C)(D)(E)(F)</sup>	49.5%	48.9%	45.0%	40.1%	42.1%
Interest expense <sup>(C)</sup>	\$ 54,500	\$ 44,900	\$ 44,800	\$ 45,000	\$ 39,600
Research and development expense	292,800	259,200	302,000	295,700	203,200
Number of employees	16,300	14,900	13,900	13,000	12,200
Net sales per employee <sup>(A)</sup>	\$ 227.9	\$ 229.3	\$ 239.1	\$ 234.6	\$ 242.5
Net income per employee <sup>(A)(B)(C)(D)(F)</sup>	32.6	9.1	21.2	53.1	43.5

(A) Amounts for 2016, 2015 and 2014 include the impact of revenue related to royalty payments received from Gore.

(B) Amounts for 2016, 2015, 2014 and 2013 include the impact of estimated costs for product liability matters, net of recoveries.

(C) Amounts for 2016 include the impact of the 2016 debt offering.

(D) Amounts for 2015 and 2013 include the impact of the proceeds received from Gore in connection with the company's patent infringement lawsuit against Gore.

(E) Amounts prior to 2016 have been restated to give effect to the adoption of certain accounting standard updates. See Note 1 of the notes to consolidated financial statements.

(F) Amounts for 2013 reflect the gain on sale of the company's electrophysiology division.

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**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

This management's discussion and analysis provides a review of the results of operations, financial condition and the liquidity and capital resources of the company and its subsidiaries. The following discussion should be read in conjunction with the consolidated financial statements and notes thereto included elsewhere in this Form 10-K. Certain statements contained herein may contain forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995; see "Risks and Uncertainties; Cautionary Statement Regarding Forward-Looking Information" below.

**Overview**

The company designs, develops, manufactures, packages, distributes and sells medical, surgical, diagnostic and patient care devices. The company sells a broad range of products to hospitals, individual healthcare professionals, extended care facilities and alternate site facilities on a global basis. Outside the United States, Europe, Japan and China are the company's largest markets, while certain emerging markets in Asia, Latin America and Eastern Europe are the company's fastest growing markets. In general, the company's products are intended to be used once and then discarded or either temporarily or permanently implanted. The company reports sales in four major product group categories: vascular, urology, oncology and surgical specialties. The company also has a product group category of other products.

The company's earnings are driven by its ability to continue to generate sales of its products and improve operating efficiency. Bard's ability to increase sales over time depends upon its success in developing, acquiring and marketing differentiated products that meet the needs of clinicians and their patients. In 2016, the company's research and development ("R&D") expense as a percentage of net sales was 7.9%. The company also makes selective acquisitions of businesses, products and technologies, generally focusing on small-to-medium sized transactions to provide ongoing growth opportunities. In addition, the company may, from time-to-time, consider acquisitions of larger, established companies. The company may also periodically divest lines of business in which it is not able to reasonably attain or maintain a leadership position in the market or for other strategic reasons. The company spent \$203.7 million in 2016, including acquired in-process R&D ("IPR&D"), for the acquisition of businesses, products and technologies.

**Acquisitions, Legal and Other Developments**

*Acquisitions*

On January 21, 2016, the company acquired all of the outstanding shares of Liberator Medical Holdings, Inc. ("Liberator"), a publicly-held direct-to-consumer distributor of urological catheters, ostomy supplies, mastectomy fashions and diabetic medical supplies for a purchase price of \$181.1 million. This acquisition enhanced the company's position in the home healthcare market in the United States.

On December 3, 2015, the company, through a wholly-owned foreign subsidiary, acquired all of the outstanding shares of Embo Medical Limited ("Embo"), a privately-held company headquartered in Galway, Ireland, specializing in the development of peripheral embolization devices. The total purchase consideration included an up-front cash payment of \$21.0 million and the fair value of future additional milestone payments of up to \$22.5 million that are contingent upon specific regulatory and revenue-related milestones being achieved, which had a fair value of \$16.6 million as of the acquisition date. The acquisition was recognized in the first quarter of 2016 for this foreign subsidiary.

For more information on acquisitions, see Note 2 of the notes to consolidated financial statements.

*Legal Developments*

During 2016, the company recorded additional charges related to product liability matters, net of estimated recoveries, to other (income) expense, net, of approximately \$205 million (\$139 million after tax).

For more information on legal matters, see Note 10 of the notes to consolidated financial statements.

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### *Debt Issuance*

On May 9, 2016, the company issued \$500 million aggregate principal amount of 3.000% senior unsecured notes due 2026 (“3.000% Notes due 2026”). Interest on the notes is payable semi-annually. Net proceeds from this offering were approximately \$495.6 million, after deducting debt offering costs, consisting of underwriting commissions and offering expenses of \$4.3 million and a debt issuance discount of \$0.1 million, which were both recorded to long-term debt. The debt offering costs and debt issuance discount will be amortized over the term of the notes. Net proceeds from the issuance of the notes were used for general corporate purposes, including repayment of outstanding commercial paper. In addition, the company’s forward starting interest rate swap was settled concurrent with the issuance of these notes. See Note 9 of the notes to consolidated financial statements.

### *Medical Device Excise Tax*

Beginning in 2013, the medical device industry was required to subsidize healthcare reform in the form of a 2.3% excise tax on United States sales of most medical devices. In December 2015, as part of the Omnibus Appropriations Act, collection of the medical device excise tax was suspended for 2016 and 2017. During 2015, the company recorded to marketing, selling and administrative expense an excise tax of \$26.9 million. The status of the excise tax for sales after December 31, 2017 is uncertain.

## **Results of Operations**

### **Net Sales**

Bard’s 2016 consolidated net sales increased 9% on a reported basis (10% on a constant currency basis) over 2015 consolidated net sales. Bard’s 2015 consolidated net sales increased 3% on a reported basis (6% on a constant currency basis) over 2014 consolidated net sales. Net sales “on a constant currency basis” is a non-GAAP measure and should not be viewed as a replacement of GAAP results. See “Management’s Use of Non-GAAP Measures” below. Price changes had the effect of decreasing consolidated net sales by approximately 40 basis points and 110 basis points for 2016 and 2015, respectively, compared to the prior years. The continued strengthening of the U.S. dollar, a trend that may continue, had the effect of decreasing consolidated net sales for 2016 by approximately one percentage point compared to the prior year. Exchange rate fluctuations had the effect of decreasing consolidated net sales for 2015 by approximately three percentage points compared to the prior year. The primary exchange rate movements that impacted net sales were the movement of the Chinese Renminbi, British Pound and the Euro compared to the U.S. dollar. The impact of exchange rate movements on net sales is not indicative of the impact on net earnings due to the offsetting impact of exchange rate movements on operating costs and expenses, costs incurred in other currencies and the company’s hedging activities.

Bard’s 2016 United States net sales of \$2,559.5 million increased 8% compared to \$2,378.4 million in 2015. Bard’s 2016 international net sales of \$1,154.5 million increased 11% on a reported basis (15% on a constant currency basis) compared to \$1,037.6 million in 2015. Bard’s 2015 United States net sales increased 5% compared to \$2,263.5 million in 2014. Bard’s 2015 international net sales decreased 2% on a reported basis (increased 8% on a constant currency basis) compared to \$1,060.1 million in 2014.

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Presented below is a summary of consolidated net sales by product group category.

### Product Group Summary of Net Sales

	For the Years Ended December 31,						
	2016	2015	Change	Constant Currency	2014	Change	Constant Currency
(dollars in millions)							
Vascular	\$1,014.9	\$ 970.3	5%	6%	\$ 928.3	5%	9%
Urology	951.8	845.0	13%	14%	835.9	1%	4%
Oncology	1,012.1	936.9	8%	9%	910.9	3%	6%
Surgical Specialties	637.3	572.3	11%	12%	555.1	3%	6%
Other	97.9	91.5	7%	10%	93.4	(2)%	—
Total net sales	<u>\$3,714.0</u>	<u>\$3,416.0</u>	9%	10%	<u>\$3,323.6</u>	3%	6%

**Vascular Products** - Bard markets a wide range of products for the peripheral vascular market, including endovascular products, and vascular graft products. Also included within vascular products are royalty payments from W. L. Gore & Associates, Inc. ("Gore"). Consolidated net sales of vascular products in 2016 increased 5% on a reported basis (6% on a constant currency basis) compared to the prior year. This increase was primarily due to growth in sales of endovascular products and was partially offset by declines in sales of divested electrophysiology products and vascular graft products. United States net sales of vascular products in 2016 increased 2% compared to the prior year. International net sales of vascular products in 2016 increased 9% on a reported basis (12% on a constant currency basis) compared to the prior year. Consolidated net sales of vascular products in 2015 increased 5% on a reported basis (9% on a constant currency basis) compared to the prior year. This increase was primarily due to growth in sales of endovascular products. United States net sales of vascular products in 2015 increased 7% compared to the prior year. International net sales of vascular products in 2015 were flat on a reported basis (increased 13% on a constant currency basis) compared to the prior year.

Consolidated net sales of endovascular products in 2016 increased 8% on a reported basis (9% on a constant currency basis) compared to the prior year. Net sales in this product line were favorably impacted by growth in sales of percutaneous transluminal angioplasty ("PTA") balloon catheters, including drug-coated PTA balloon catheters, biopsy products, and stents, and were partially offset by a decline in sales of vena cava filters, a trend that is expected to continue. Consolidated net sales of endovascular products in 2015 increased 6% on a reported basis (10% on a constant currency basis) compared to the prior year. Net sales in 2015 were favorably impacted by growth in sales of PTA balloon catheters, including drug-coated PTA balloon catheters, and biopsy products, and were partially offset by a decline in sales of stents.

Consolidated net sales of vascular graft products in 2016 decreased 2% on a reported basis (1% on a constant currency basis) compared to the prior year. Consolidated net sales of vascular graft products in 2015 decreased 6% on a reported basis (flat on a constant currency basis) compared to the prior year. These decreases were primarily due to declines in sales of peripheral vascular grafts.

In January 2017, the company received \$41.9 million from Gore, representing Gore's calculation of royalties for its infringing sales for the quarter ended December 31, 2016. This royalty payment will be recorded to revenue in the first quarter of 2017.

**Urology Products** - Bard markets a wide range of products for the urology market, including basic urology drainage products, fecal and urinary continence products and urological specialty products. Bard also markets StatLock® catheter stabilization products, which are used to secure many types of catheters sold by Bard and other companies, as well as Targeted Temperature Management™ products, which are used for therapeutic hypothermia. In 2016, consolidated net sales of urology products increased 13% on a reported basis (14% on a constant currency basis) compared to the prior year. This increase includes 9 percentage points of growth on both a reported basis and constant currency basis from direct-to-consumer sales as a result of the Liberator acquisition in January 2016. Consolidated net sales of urology products also includes 1 percentage point of growth on both a reported basis and constant currency basis due to the impact of the Medicon, Inc. ("Medicon") acquisition. Net



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sales in 2016 were also favorably impacted by growth in sales of basic drainage products and Targeted Temperature Management™ products and were partially offset by declines in sales of StatLock® catheter stabilization products. United States net sales of urology products in 2016 increased 16% compared to the prior year and were favorably impacted by the Liberator acquisition. International net sales in 2016 increased 7% on a reported basis (11% on a constant currency basis) compared to the prior year. In 2015, consolidated net sales of urology products increased 1% on a reported basis (4% on a constant currency basis) compared to the prior year. This increase was primarily due to growth in sales of basic drainage products and Targeted Temperature Management™ products and was partially offset by declines in sales of surgical continence products and urological specialty products. United States net sales of urology products in 2015 increased 4% compared to the prior year. International net sales in 2015 decreased 5% on a reported basis (increased 3% on a constant currency basis) compared to the prior year. International net sales for 2015 reflected declines in sales of basic drainage products, continence products and urological specialty products.

Consolidated net sales of basic drainage products in 2016 increased 15% on a reported basis (16% on a constant currency basis) compared to the prior year. The increase was primarily due to sales as a result of the Liberator and Medicon acquisitions. Consolidated net sales of basic drainage products in 2015 increased 2% on a reported basis (4% on a constant currency basis) compared to the prior year.

Consolidated net sales of urological specialty products in 2016 increased 7% on a reported basis (9% on a constant currency basis) compared to the prior year primarily due to the impact of the Medicon acquisition. Consolidated net sales of urological specialty products in 2015 decreased 4% on a reported basis (increased 1% on a constant currency basis) compared to the prior year primarily due to declines in sales of brachytherapy products.

Consolidated net sales of continence products in 2016 increased 24% on a reported basis (28% on a constant currency basis) compared to the prior year. This was primarily due to an increase in sales as a result of the Liberator and Medicon acquisitions and was partially offset by declines in sales of surgical continence products, a trend that is expected to continue. Consolidated net sales of continence products in 2015 decreased 4% on a reported basis (increased 2% on a constant currency basis) compared to the prior year. This decrease was primarily due to declines in sales of surgical continence products, and was partially offset by an increase in sales of continence care products.

Consolidated net sales of the StatLock® catheter stabilization product line in 2016 decreased 3% on a reported basis (2% on a constant currency basis) compared to the prior year, a trend that may continue. Consolidated net sales of the StatLock® catheter stabilization product line in 2015 decreased 2% on a reported basis (flat on a constant currency basis) compared to the prior year.

**Oncology Products** - Bard's oncology business includes specialty vascular access products and enteral feeding devices. Specialty vascular access products include peripherally inserted central catheters ("PICCs") used for intermediate to long-term central venous access, specialty access ports and accessories ("Ports") used most commonly for chemotherapy, dialysis access catheters and vascular access ultrasound devices which help facilitate the placement of PICCs. In 2016, consolidated net sales of oncology products increased 8% on a reported basis (9% on a constant currency basis) compared to the prior year. The increase was primarily due to growth in sales of PICCs, Ports, and dialysis access catheters. United States net sales of oncology products in 2016 increased 4% compared to the prior year. International net sales in 2016 increased 17% on a reported basis (21% on a constant currency basis) compared to the prior year. In 2015, consolidated net sales of oncology products increased 3% on a reported basis (6% on a constant currency basis) compared to the prior year. The increase in consolidated net sales for 2015 was primarily due to growth in sales of PICCs and was partially offset by declines in sales of Ports. United States net sales of oncology products in 2015 increased 3% compared to the prior year. International net sales in 2015 increased 2% on a reported basis (13% on a constant currency basis) compared to the prior year.

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Consolidated net sales of PICCs in 2016 increased 7% on a reported basis (8% on a constant currency basis) compared to the prior year. Consolidated net sales of PICCs in 2015 increased 8% on a reported basis (11% on a constant currency basis) compared to the prior year.

Consolidated net sales of Ports in 2016 increased 8% on both a reported basis and constant currency basis compared to the prior year. Consolidated net sales of Ports in 2015 decreased 6% on a reported basis (3% on a constant currency basis) compared to the prior year.

Consolidated net sales of dialysis access catheters in 2016 increased 10% on a reported basis (11% on a constant currency basis) compared to the prior year. Consolidated net sales of vascular access ultrasound devices in 2016 increased 8% on a reported basis (9% on a constant currency basis) compared to the prior year. Consolidated net sales of dialysis access catheters in 2015 increased 5% on a reported basis (9% on a constant currency basis) compared to the prior year. Consolidated net sales of vascular access ultrasound devices in 2015 increased 5% on a reported basis (8% on a constant currency basis) compared to the prior year.

**Surgical Specialty Products** - Surgical specialty products include soft tissue repair products, performance irrigation devices and biosurgery products, including hemostats and sealants. In 2016, consolidated net sales of surgical specialty products increased 11% on a reported basis (12% on a constant currency basis) compared to the prior year. This increase is primarily due to growth in sales of synthetic hernia repair products and biosurgery products and was partially offset by declines in sales of natural hernia repair products and performance irrigation products. United States net sales of surgical specialty products in 2016 increased 9% compared to the prior year. International net sales in 2016 increased 18% on a reported basis (21% on a constant currency basis) compared to the prior year. In 2015, consolidated net sales of surgical specialty products increased 3% on a reported basis (6% on a constant currency basis) compared to the prior year. This increase was primarily due to growth in sales of biosurgery products and synthetic hernia repair products and was partially offset by a decline in sales of performance irrigation products. United States net sales of surgical specialty products in 2015 increased 7% compared to the prior year. International net sales in 2015 decreased 8% on a reported basis (increased 2% on a constant currency basis) compared to the prior year. International net sales for 2015 reflected declines in sales of synthetic hernia repair products and performance irrigation products and was partially offset by an increase in sales of biosurgery products.

The soft tissue repair product line includes synthetic and natural tissue hernia repair implants, natural tissue breast reconstruction implants, and hernia fixation products. Consolidated net sales of soft tissue repair products in 2016 increased 11% on a reported basis (12% on a constant currency basis) compared to the prior year. Net sales in 2016 were favorably impacted by growth in sales of synthetic hernia repair products and hernia fixation products and were partially offset by a decline in sales of natural tissue hernia repair products, a trend that may continue. Consolidated net sales of soft tissue repair products in 2015 increased 4% on a reported basis (7% on a constant currency basis) compared to the prior year. Net sales in 2015 were favorably impacted by growth in sales of synthetic hernia repair products and natural tissue hernia repair products.

Consolidated net sales of biosurgery products in 2016 increased 18% on a reported basis (19% on a constant currency basis) compared to the prior year primarily due to growth in sales of hemostats. Consolidated net sales of biosurgery products in 2015 increased 14% on both a reported basis and constant currency basis compared to the prior year primarily due to growth in sales of hemostats and surgical sealant products.

Consolidated net sales of performance irrigation products in 2016 decreased 8% on both a reported basis and constant currency basis compared to the prior year, a trend that may continue. Consolidated net sales of performance irrigation products in 2015 decreased 30% on a reported basis (28% on a constant currency basis) compared to the prior year period.

**Other Products** - The other product group includes irrigation, wound drainage and certain original equipment manufacturers' products. Consolidated net sales of other products for 2016 increased 7% on a

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reported basis (10% on a constant currency basis) compared to the prior year primarily due to sales as a result of certain products sold by Liberator. Consolidated net sales of other products for 2015 decreased 2% on a reported basis (flat on a constant currency basis) compared to the prior year.

### Costs and Expenses

The following is a summary of costs and expenses as a percentage of net sales for the following years ended December 31:

	<u>2016(A)</u>	<u>2015(A)</u>	<u>2014</u>
Cost of goods sold	36.9%	38.1%	37.9%
Marketing, selling and administrative expense	29.7%	29.6%	29.5%
Research and development expense	7.9%	7.6%	9.1%
Interest expense	1.5%	1.3%	1.3%
Other (income) expense, net	6.2%	13.1%	8.8%
Total costs and expenses	<u>82.1%</u>	<u>89.8%</u>	<u>86.6%</u>

(A) Amounts do not add due to rounding.

**Cost of goods sold** - Cost of goods sold consists principally of the manufacturing and distribution costs of the company's products. The category also includes royalties paid by the company, amortization of intangible assets and the impact of certain hedging activities. Cost of goods sold as a percentage of net sales for 2016 decreased 120 basis points compared to the prior year primarily due to manufacturing cost improvements and favorable mix, partially offset by exchange rate fluctuations. Cost of goods sold as a percentage of net sales for 2015 increased 20 basis points compared to the prior year due to the impact of lower selling prices and exchange rate fluctuations. Incremental amortization of intangible assets primarily related to the Lutonix® drug-coated PTA balloon and intangible assets acquired in 2015 increased cost of goods sold as a percentage of net sales by approximately 40 basis points over the prior year. These increases were partially offset by the reversal of a liability with respect to a certain revenue-based milestone and cost improvements.

**Marketing, selling and administrative expense** - Marketing, selling and administrative expense consists principally of the costs associated with the company's sales and administrative organizations. These costs as a percentage of net sales for 2016 increased 10 basis points compared to the prior year primarily due to related costs from operations acquired in 2016 and 2015. This increase was partially offset by the suspension of the excise tax on medical device sales for 2016. These costs as a percentage of net sales for 2015 increased 10 basis points from the prior year primarily due to related costs from operations acquired in 2015.

**Research and development expense** - Research and development expense consists principally of the costs related to internal research and development activities, milestone payments for third-party research and development activities, and IPR&D costs arising from the company's business development activities. IPR&D payments may impact the comparability of the company's results of operations between periods. The following table presents a summary of research and development expense for the following years ended December 31:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
(dollars in millions)			
Research and development	\$292.3	\$254.7	\$265.9
In-process research and development	0.5	4.5	36.1
Total research and development expense	<u>\$292.8</u>	<u>\$259.2</u>	<u>\$302.0</u>

Research and development expense in 2016 increased approximately 13% compared to the prior year. Research and development expense in 2015 decreased approximately 4% compared to the prior year. IPR&D in

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2015 and 2014 included charges of \$4.5 million and \$6.8 million, respectively, related to the impairment of IPR&D projects, primarily due to changes in cash flow assumptions. In addition, IPR&D in 2014 included charges of \$26.7 million primarily related to the change in the fair value of the liability for contingent consideration related to the Lutonix, Inc. (“Lutonix”) acquisition, and \$2.6 million related to the acquisition of early-stage technology.

**Interest expense** - Interest expense in 2016 was \$54.5 million as compared with 2015 interest expense of \$44.9 million and 2014 interest expense of \$44.8 million. The increase in interest expense for 2016 compared to 2015 is primarily due to the issuance of the 3.000% Notes due 2026 and the impact from the amortization of the related forward-starting interest rate swap.

**Other (income) expense, net** - Other (income) expense, net, was expense of \$229.4 million, \$449.2 million and \$290.9 million for 2016, 2015 and 2014, respectively. Other (income) expense, net, in 2016 included \$205.2 million for litigation charges, net, \$30.4 million for restructuring and productivity initiatives costs, and a net benefit of \$1.3 million for acquisition-related items primarily consisting of integration-related costs and purchase accounting adjustments. Other (income) expense, net, in 2015 included \$595.1 million for litigation charges, net, a gain of \$210.5 million representing the total amount of enhanced damages awarded by the U.S. District Court for the District of Arizona due to Gore’s willfulness in connection with the company’s lawsuit against Gore for infringing Bard’s patent number 6,436,135 and an audit adjustment related to the payment of royalties through September 30, 2013 (the “Gore Proceeds”), \$41.5 million for restructuring and productivity initiatives costs, and net charges of \$24.7 million for acquisition-related items consisting of purchase accounting adjustments and integration-related costs. Other (income) expense, net, in 2014 included \$288.6 million for litigation charges, net, \$11.8 million for restructuring and productivity initiative costs, and a gain on sale of an equity investment of \$7.1 million.

### **Income Tax Provision**

The effective tax rate was 19.9% for 2016 compared to 61.2% for 2015 and 33.9% in 2014.

The effective tax rate for 2016 reflected the tax effects of litigation charges related to product liability claims, which were substantially incurred in a high tax jurisdiction and a benefit of \$2.6 million related to the completion of certain U.S. Internal Revenue Service examinations. See Note 10 of the notes to consolidated financial statements.

The effective tax rate for 2015 reflected the tax effects of litigation charges, primarily related to product liability claims, which were substantially incurred in a low tax jurisdiction and a gain related to the Gore Proceeds, which was incurred in a high tax jurisdiction. See Note 10 of the notes to consolidated financial statements.

The effective tax rate for 2014 reflected the tax effects of litigation charges, primarily related to product liability claims, which were substantially incurred in a low tax jurisdiction and a benefit of \$10.9 million related to the completion of IRS examinations for the tax years 2008 through 2010. See Note 10 of the notes to consolidated financial statements.

### **Net Income and Earnings per Share Available to Common Shareholders**

The company reported 2016 net income of \$531.4 million, an increase of 292% from 2015 net income of \$135.4 million. The company reported 2016 diluted earnings per share available to common shareholders of \$7.03, an increase of 297% from 2015 diluted earnings per share available to common shareholders of \$1.77. Net income in 2016 reflects litigation charges, net, of \$139.0 million, or \$1.84 per diluted share, amortization of intangible assets of \$86.1 million, or \$1.14 per diluted share, restructuring and productivity initiative costs of \$20.2 million, or \$0.27 per diluted share, net charges from acquisition-related items (primarily consisting of

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integration costs and purchase accounting adjustments) of \$2.0 million, or \$0.03 per diluted share, and an asset impairment of \$1.2 million, or \$0.02 per diluted share. The current year also reflects a \$2.6 million, or \$0.03 per diluted share, benefit to the income tax provision as a result of the completion of certain IRS examinations.

The company reported 2015 net income of \$135.4 million, a decrease of 54% from 2014 net income of \$294.5 million. The company reported 2015 diluted earnings per share available to common shareholders of \$1.77, a decrease of 53% from 2014 diluted earnings per share available to common shareholders of \$3.76. Net income in 2015 reflects litigation charges, net, of \$568.8 million, or \$7.43 per diluted share, Gore Proceeds of \$131.7 million, or \$1.72 per diluted share, amortization of intangible assets of \$79.3 million, or \$1.04 per diluted share, restructuring and productivity initiative costs of \$29.4 million, or \$0.39 per diluted share, net charges from acquisition-related items (primarily consisting of purchase accounting adjustments, integration costs and transaction costs) of \$11.1 million, or \$0.15 per diluted share, and an asset impairment of \$2.8 million, or \$0.04 per diluted share.

### Liquidity and Capital Resources

The company assesses its liquidity in terms of its ability to generate cash to fund its operating, investing and financing activities. Significant factors affecting the management of liquidity are cash flows generated from operating activities, capital expenditures, acquisitions of businesses and technologies, cash dividends and common stock repurchases. Cash provided from operations continues to be a primary source of funds. The company believes that it could borrow adequate funds at competitive terms should it be necessary. The company also believes that its overall financial strength gives it sufficient financial flexibility. The table below summarizes liquidity measures for Bard for the following years ended December 31:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
(dollars in millions)			
Cash and cash equivalents	<u>\$ 905.0</u>	<u>\$ 950.5</u>	<u>\$ 960.1</u>
Working capital	<u>\$1,207.5</u>	<u>\$ 708.6</u>	<u>\$1,339.2</u>
Current ratio	<u>2.09/1</u>	<u>1.56/1</u>	<u>3.18/1</u>

Cash and cash equivalents held by the company's foreign subsidiaries were \$806.0 million and \$881.6 million at December 31, 2016 and 2015, respectively. It is the company's intention to permanently reinvest the majority of these funds outside the United States to finance foreign operations, and the company's plans do not demonstrate a need to repatriate these funds. If these funds are needed for U.S. operations for currently unforeseen circumstances or can no longer be permanently reinvested outside the United States, the company would be required to accrue and pay U.S. taxes on the earnings associated with these funds. In the United States, ongoing operating cash flows and available borrowings under the company's committed syndicated bank credit facility provide it with sufficient liquidity.

For the years ended December 31, 2016, 2015 and 2014, net cash provided by operating activities was \$546.6 million, \$798.1 million and \$660.0 million, respectively. The decrease in net cash provided by operating activities in 2016 compared to 2015 is primarily due to higher payments to claimants for certain product liability matters in the current year period partially offset by lower tax payments in 2016 compared to 2015, a decrease in settlement payments pursuant to an agreement with Medtronic (see Note 10 of the notes to consolidated financial statements) in 2016 compared to 2015 and the receipt of the Gore Proceeds in 2015. The increase in net cash provided by operating activities in 2015 compared to 2014 is primarily due to the receipt of the Gore Proceeds in 2015, lower tax payments in 2015 compared to 2014, and higher operational cash flows. These increases were partially offset by settlement payments pursuant to an agreement with Medtronic and higher payments to claimants for certain product liability matters in the current year period.

During 2016, the company used \$423.9 million in cash for investing activities, \$212.5 million more than in 2015. During 2015, the company used \$211.4 million in cash for investing activities, \$48.1 million more than in

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2014. Capital expenditures amounted to \$100.3 million, \$102.9 million and \$126.6 million for the years ended December 31, 2016, 2015 and 2014, respectively. The company spent \$203.7 million in 2016, \$98.3 million in 2015 and \$13.3 million in 2014 for the acquisition of businesses, products and technologies to augment existing product lines. In addition, the company received net proceeds from the sale of financial instruments acquired in the Medicon Acquisition of \$21.0 million in 2015. Net cash used in investing activities reflects an increase of \$121.1 million in 2016 and an increase of \$31.2 million in both 2015 and 2014 in restricted cash related to payments to qualified settlement funds (“QSFs”) for certain product liability matters.

During 2016, 2015 and 2014, the company used \$149.8 million, \$554.1 million and \$584.4 million in cash for financing activities, respectively. Total debt was \$1.6 billion and \$1.4 billion at December 31, 2016 and 2015, respectively. Total debt to total capitalization was 49.5%, 48.9% and 45.0% at December 31, 2016, 2015 and 2014, respectively, which reflects net proceeds of \$495.6 million from the issuance fixed-rate partially offset by the redemption of other fixed rate debt of \$250 million. The company spent approximately \$406.9 million to repurchase 2,000,000 shares of common stock in 2016 compared to \$498.7 million to repurchase 2,745,289 shares of common stock in 2015 and \$659.6 million to repurchase 4,497,427 shares of common stock in 2014. The company paid cash dividends of \$74.6 million, \$69.4 million and \$66.2 million in 2016, 2015 and 2014, respectively. The company made a contingent milestone payment of \$100.0 million in 2014 related to the acquisition of Lutonix, of which \$70.0 million represented the fair value previously established at the acquisition date and was included in financing activities.

In November 2016, the company amended its \$1.0 billion five-year committed syndicated bank credit facility that was scheduled to expire in November 2020. The amendment extends the commitment termination date until November 2021. The amended credit facility supports the company’s commercial paper program and can be used for general corporate purposes. The facility includes pricing based on the company’s long-term credit ratings and includes a financial covenant that limits the amount of total debt to total capitalization. At December 31, 2016, the company was in compliance with this covenant. There were no commercial paper borrowings outstanding at December 31, 2016 or 2015.

### Contractual Obligations

Payments due under contractual obligations at December 31, 2016, are as follows:

(dollars in millions)	Total	1 Year	2-3 Years	4-5 Years	5+ Years
Forward contracts	\$ 243.2	\$ 213.2	\$ 30.0	\$ —	\$ —
Long-term debt, including current maturities	2,002.0	53.9	597.5	583.1	767.5
Operating lease obligations	149.0	35.0	51.4	25.6	37.0
Acquisition and related milestones	78.8	14.9	35.0	16.0	12.9
Purchase obligations	397.8	241.4	82.7	36.1	37.6
Legal settlements	605.3	605.3	—	—	—
Other long-term liabilities	130.0	10.9	17.4	15.6	86.1
	<u>\$3,606.1</u>	<u>\$1,174.6</u>	<u>\$814.0</u>	<u>\$676.4</u>	<u>\$941.1</u>

The table above does not include \$21.5 million of the total unrecognized tax benefits for uncertain tax positions and \$2.6 million of associated accrued interest. Due to the high degree of uncertainty regarding the timing of potential future cash flows, the company is unable to make a reasonable estimate of the amount and period in which these liabilities might be paid.

*Forward contracts* - Forward contracts obligate the company for the forward purchase of currencies in which the company has known or anticipated sales or payments.

*Long-term debt, including current maturities* - Long-term debt, including current maturities, includes expected principal and interest payments.

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*Operating lease obligations* - The company is committed under noncancelable operating leases involving certain facilities and equipment.

*Acquisition and related milestones* - The company may make payments to third parties when milestones are achieved, such as the achievement of research and development targets, receipt of regulatory approvals or achievement of performance or operational targets under various acquisition and related arrangements. In addition, the company is also required to make annual future payments to Kobayashi Pharmaceutical Co., Ltd., its former joint venture partner, as part of the Medicon Acquisition. The table above excludes amounts for these milestone payments unless the payments are deemed reasonably likely to occur.

*Purchase obligations* - The company's business creates a need to enter into commitments with suppliers. These inventory purchase commitments do not exceed the company's projected requirements over the related terms and are entered into in the normal course of business.

*Legal settlements* - Estimated amounts recorded to accrued expenses for product liability and other legal matters. The table above does not include non-current accruals for product liability and other legal matters of \$596.2 million and expected recoveries of \$267.3 million, of which \$156.2 million was recorded to other current assets, at December 31, 2016. Payments and final settlements for certain of these matters are subject to numerous factors and conditions (outside the company's control) that make timing and ultimate resolution uncertain.

*Other long-term liabilities* - The company estimates required funding obligations related to its pension and postretirement benefit plans and deferred compensation.

### **Certain Regulatory Matters**

In October 2014 and November 2014, the United States Food and Drug Administration ("FDA") conducted directed inspections at two of the company's facilities after which the FDA issued Form-483's to the company in connection with these inspections. On July 14, 2015, the company received a Warning Letter from the Los Angeles District office of the FDA. The Warning Letter specifically cited quality systems and medical device reporting observations relating to non-conformances previously identified in the Form-483 notices for Glens Falls, New York and Tempe, Arizona and appropriate market clearance or approval of two models of our Recovery Cone Removal Systems used to retrieve certain implanted filters. The Warning Letter stated that, until the company resolves the outstanding issues covered by the Warning Letter, no premarket submissions for Class III devices to which the non-conformances are reasonably related will be cleared or approved. The company responded to the Form-483 notices and the Warning Letter, and in each case, implemented corrective and preventive actions to address the concerns identified and on February 18, 2016, received market clearance for the two models of the Recovery Cone Removal Systems. The FDA conducted planned follow-up inspections at the Glens Falls and Tempe facilities during the first quarter of 2016 which resulted in the FDA issuing Form-483's identifying observations regarding the quality systems at these facilities. The company responded to the FDA and implemented corrective and preventive actions to address the observations. In May 2016, the FDA notified the company that the FDA required further follow-up re-inspections with respect to the issues cited in the Warning Letter. In November 2016, the FDA re-inspected both the Glenn Falls and Tempe facilities with no inspection observations noted. Subsequently, in December 2016, the FDA notified the company that the observations relating to the Glenn Falls and Tempe facilities contained in the Form-483 notices and the Warning Letter had been satisfactorily resolved and closed out.

In the second quarter of 2016, the FDA conducted an inspection at another of the company's facilities after which the FDA issued a Form-483 to the company in connection with this inspection. The company responded to the FDA, is in the process of addressing the observations in the Form-483, and intends to fully implement corrective and preventive actions to address the FDA's concerns. However, the company cannot give any assurances that the FDA will be satisfied with its response to the Form-483 or to the expected date of resolution of matters included in the Form-483. Although the company cannot give any assurances that the resolution of this

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matter will not have a material adverse effect on the company's business, results of operations, financial conditions and/or liquidity, the company does not at this time believe this will have a material impact on its financial statements.

### **Management's Use of Non-GAAP Measures**

Net sales "on a constant currency basis" is a non-GAAP measure. The company analyzes net sales on a constant currency basis to better measure the comparability of results between periods. Because changes in foreign currency exchange rates have a non-operating impact on net sales, the company believes that evaluating growth in net sales on a constant currency basis provides an additional and meaningful assessment of net sales to both management and the company's investors. Constant currency growth rates are calculated by translating the prior year's local currency sales by the current period's exchange rate. Constant currency growth rates are not indicative of changes in corresponding cash flows. The limitation of these non-GAAP measures is that they do not reflect results on a standardized reporting basis. Non-GAAP measures are intended to supplement the applicable GAAP disclosures and should not be viewed as replacements of GAAP results.

### **Critical Accounting Policies and Estimates**

The preparation of financial statements requires the company's management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Critical accounting policies are those that require application of management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. The following is not intended to be a comprehensive list of all of the company's accounting policies. The company's significant accounting policies are more fully described in the company's notes to consolidated financial statements. See Note 1 of the notes to consolidated financial statements. The critical accounting policies described below are areas in which management's judgment in determining estimates and assumptions might produce a materially different result.

*Revenue Recognition* - Generally, sales to end-user customers and European distributors are recognized at the point of delivery, and sales to domestic distributors are recognized at the time of shipment. In certain circumstances, end-user customers may require the company to maintain consignment inventory at the customer's location. In the case of consignment inventories, revenues and associated costs are recognized upon the notification of usage by the customer.

Royalty revenue is recognized as earned in accordance with the contract terms when royalty revenue can be objectively determined. If royalty revenue cannot be objectively determined during the quarterly period in which it is earned, then royalty revenue is recognized in the following quarterly period when objective evidence is obtained and the revenue becomes fixed and determinable.

*Share-Based Compensation* - Share-based compensation cost is measured at the grant date based on the fair value of the award. Generally, compensation expense is recognized on a straight-line basis over the vesting period. In order to determine the fair value of stock options on the grant date, the company utilizes a binomial model. Inherent in the binomial model are assumptions related to expected stock-price volatility, option life, risk-free interest rate and dividend yield. The expected stock-price volatility is based upon weightings of the historical volatility of the company's stock and the implied volatility from publicly traded options. The company reviews the trading volumes and option life of its publicly traded options in order to determine the appropriate weighting of implied volatility. This approach is used as a predictor of future realized and implied volatilities and is directly related to stock option valuations. With respect to expected future exercise behavior, the company considers the exercise behavior of past grants and models the pattern of aggregate exercises. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the grant date with a term equal to the contractual term of the stock option.



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*Contingencies* - The company is subject to various legal proceedings and claims, including, for example, product liability matters, environmental matters, employment disputes, disputes regarding agreements and other commercial disputes, the outcomes of which are not within the company's complete control and may not be known for extended periods of time. In some cases, the claimants seek damages, as well as other relief, which, if granted, could require significant expenditures. The company records a liability in its consolidated financial statements for damages and/or costs related to claims, settlements and judgments where the company has assessed that the loss is probable and an amount can be reasonably estimated. If the estimate of a probable loss is a range and no amount within the range is more likely, the company accrues the minimum amount of the range. The company records expected recoveries from its product liability insurance carriers or other parties when those recoveries are probable and collectible. Amounts recovered under these arrangements may be less than the stated coverage limits or less than otherwise expected and may not be adequate to cover damages and/or costs. In addition, there is no guarantee that insurers or others will pay claims or that coverage or indemnity will be otherwise available. Legal costs associated with these matters are expensed as incurred. See Note 10 of the notes to consolidated financial statements.

*Income Taxes* - The company operates in multiple taxing jurisdictions, both within the United States and internationally. The company regularly assesses its tax positions and includes reserves for uncertain tax positions. These positions relate to transfer pricing, the deductibility of certain expenses, intercompany transactions, state taxes and other matters. Although the outcome of tax audits is uncertain, in management's opinion, adequate provisions for income taxes have been made for potential liabilities resulting from such matters. The recognition and measurement of a tax position is based on the company's best judgment given the facts, circumstances and information available at the reporting date. The reserves are used or reversed once the statutes of limitation have expired or the position is effectively settled. The company believes that the ultimate outcome of these matters will not have a material impact on its financial condition and/or liquidity but may be material to its income tax provision and results of operations.

*Allowance for Doubtful Accounts, Customer Rebates and Inventory Writedowns* - The company makes estimates of the uncollectibility of the company's accounts receivable, amounts that are rebated to specific customers in accordance with contractual requirements and inventory adjustments to reflect inventory valuation at the lower of cost or market. In estimating the reserves necessary for the allowance for doubtful accounts, management considers historical bad debt trends, customer concentrations, the average length of time to collect receivables, customer creditworthiness and current economic and market trends. The company establishes an allowance for doubtful accounts for amounts deemed uncollectible from customers. In estimating the allowance for customer rebates, management considers the lag time between the point of sale and the payment of the customer's rebate claim, customer specific trend analysis and contractual commitments including the stated rebate rate. The company establishes an allowance for customer rebates and reduces sales for such rebate amounts. In estimating the adjustment for inventory writedowns, management considers product obsolescence, quantity on hand, future demand for the product and other market-related conditions. The company records an adjustment for inventory writedowns when such conditions cause the inventory market value to be below carrying value. The company records such adjustments to cost of sales in the period in which the condition exists.

It is possible that the underlying factors discussed above for the allowance for doubtful accounts, customer rebates and inventory writedowns could change. Depending on the extent and nature of the change to the underlying factors, the impact to the company's results of operations and financial condition could be material in the period of change.

*Acquisitions* - In a business combination, the acquisition method of accounting requires that the identifiable assets acquired and liabilities assumed be measured at their fair value, with goodwill being the excess value of consideration paid over the fair value of the net identifiable assets acquired. IPR&D is capitalized and recorded as an indefinite-lived intangible asset at the acquisition date, contingent consideration is recorded at fair value at the acquisition date, and transaction costs are expensed as incurred. When the company acquires net assets that are not accounted for as a business combination, no goodwill is recognized.

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IPR&D represents intangible assets acquired in a business combination that are used in research and development activities but have not yet reached technological feasibility. The amount of the purchase price allocated to IPR&D and other intangible assets is generally determined by estimating the future cash flows of each project or technology and discounting the net cash flows back to their present values. The discount rate used is determined at the time of the acquisition in accordance with accepted valuation methods. The determination of fair value of IPR&D takes into consideration: the project's stage of completion as of the acquisition date; the timing and cost of R&D work required to complete the project; the risk of a project not achieving commercial feasibility; and estimated future cash flows. Amounts capitalized as IPR&D are subject to an impairment review, using a fair value-based test, until completion or abandonment of a project. Upon successful completion, a separate determination will be made as to the useful life of the asset and amortization will begin. If the project is abandoned, the IPR&D asset will be written off.

The fair value of the liability for contingent consideration recorded on the acquisition date is based on probability weighted estimated cash flow streams, discounted back to present value using a discount rate determined in accordance with accepted valuation methods. The liability for contingent consideration is remeasured to fair value at each reporting period with changes recorded in earnings until the contingency is resolved.

The judgments made in determining fair value assigned to assets acquired and liabilities assumed, as well as asset lives, can materially impact results of operations.

*Goodwill* - Goodwill is tested for impairment annually at December 31 or more frequently if impairment indicators arise using a fair-value based test. The company assigns goodwill recorded in connection with acquisitions to its four reporting units, each of which is one level below the company's single reporting segment. The fair value of each reporting unit is calculated and compared to its carrying value. In determining the fair value of each reporting unit, the company uses a weighted-average combination of both market and income approaches. The market approach to estimating fair value is based primarily on applying external market information to a historical earnings measure. The income approach to estimating fair value is based on a discounted value of estimated future cash flows of the reporting unit. If the carrying amount of a reporting unit exceeds its fair value, then the company will record an impairment loss for the excess of the carrying value of goodwill over its implied fair value.

*Impairment of Long-Lived Assets* - Intangible assets with finite lives and other long-lived assets, such as property, plant and equipment, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The company evaluates the recoverability of assets to be held and used by comparing the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset.

*Pension Plans* - The company sponsors pension plans covering certain domestic and foreign employees who meet eligibility requirements. Several statistical and other factors that attempt to anticipate future events are used in calculating the expense and liability related to the plans. These factors include assumptions about the discount rate, expected return on plan assets and rate of future compensation increases as determined by the company. In 2016, the company changed its method used in calculating the service and interest cost components of net periodic pension cost. See Note 12 of the notes to consolidated financial statements. In addition, the company also uses subjective factors, such as withdrawal and mortality rates, to estimate these factors. The actuarial assumptions used by the company may differ materially from actual results due to changing market and economic conditions, higher or lower withdrawal rates or longer or shorter life spans of the participants. A change of plus (minus) 25 basis points in the discount rate assumption, with other assumptions held constant, would have an estimated \$1.5 million favorable (unfavorable) impact on the company's net pension cost. A

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change of plus (minus) 25 basis points in the expected rate of return on plan assets assumption, with other assumptions held constant, would have an estimated \$1.1 million favorable (unfavorable) impact on the company's net pension cost.

### **New Accounting Pronouncements Not Yet Adopted**

In January 2017, the Financial Accounting Standards Board ("FASB") issued an accounting standard update that clarifies the definition of a business by providing a more robust framework to evaluate whether transactions should be accounted for as an acquisition of assets or business. This update is expected to reduce the number of transactions that will be accounted for as an acquisition of a business. The effects of this update will depend on future acquisitions. The company intends to adopt this standard early as of the beginning of Bard's 2017 fiscal year.

In November 2016, the FASB issued an accounting standard update that requires the change in the total of cash, cash equivalents, and restricted cash to be shown in the statement of cash flows. As a result, transfers between cash, cash equivalents, and restricted cash will no longer be presented in the statement of cash flows. This update will be effective as of the beginning of Bard's 2018 fiscal year, with early adoption permitted. Other than the impact of this change on the statements of cash flows, this update is not expected to have a material impact on the company's consolidated financial statements.

In October 2016, the FASB issued an accounting standard update that requires the immediate recognition of the income tax effects of intra-entity transfers of assets other than inventory at the time of the transfer. This update will be effective as of the beginning of Bard's 2018 fiscal year, with early adoption permitted at the beginning of an annual period. The company is assessing the impact of inter-entity transfers on the company's consolidated financial statements.

In March 2016, the FASB issued an accounting standard update that includes multiple provisions intended to simplify various aspects of the accounting for share-based payments, including the income tax items and the classification of these items on the statement of cash flows. This update will be effective as of the beginning of Bard's 2017 fiscal year. This standard will result in the recognition of excess income tax benefits to the consolidated statements of income upon settlement of share-based compensation awards, which is largely dependent on the exercise/vesting of awards and variables such as the company's stock price at the time of the exercise/vesting of awards and the exercise price of the underlying awards. Other than the recognition of excess income tax benefits which may be material to the consolidated statements of income and the classification of these items on the statements of cash flows, this update is not expected to have a material impact on the company's consolidated financial statements.

In February 2016, the FASB issued a new accounting standard to use in the accounting for leases. The new standard will require, among other items, lessees to recognize most leases on the balance sheet by recording a right-of-use asset and a lease liability. This standard will be effective as of the beginning of Bard's 2019 fiscal year. Other than this impact to the company's consolidated balance sheet, the new standard is not expected to have a material impact on the company's consolidated financial statements.

In May 2014, the FASB issued a new accounting standard that provides for a comprehensive model to use in the accounting for revenue arising from contracts with customers. Under this standard, revenue will be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In August 2015, the FASB issued an accounting standard update to defer this standard's effective date for one year, which will now begin with Bard's 2018 fiscal year. Under this standard, the company expects to recognize royalty revenue in earlier periods than under its current policy, and for other contracts that do not meet the new criteria for recognizing revenue over time. In addition, revenue will be recognized in earlier periods, where the company maintains risk of loss for products that are in-transit to the customer. The company has made substantial progress in its evaluation of the new standard, and other than these items, this standard is not expected to have a material

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impact on the company's consolidated financial statements. The company will continue to assess the new standard, as well as updates to the standard that have been proposed by the FASB. The company intends to adopt the standard under the modified retrospective approach beginning with Bard's 2018 fiscal year.

### **Risks and Uncertainties; Cautionary Statement Regarding Forward-Looking Information**

Certain statements contained herein or in other company documents and certain statements that may be made by management of the company orally may contain forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. You can identify these statements by the fact that they do not relate strictly to historical or current facts. They use words such as "anticipate," "estimate," "expect," "project," "intend," "forecast," "plan," "believe" and other words and terms of similar meaning in connection with any discussion of future operating or financial performance. In particular, these include statements relating to product approvals, future performance of current and anticipated products, sales efforts, expenses, the outcome of contingencies, such as legal proceedings, and financial results. The company's forward-looking statements speak only as of the date of this report or as of the date they are made, and the company undertakes no obligation to update its forward-looking statements.

In addition, there are substantial risks inherent in the medical device business. The company's business involves the design, development, manufacture, packaging, distribution and sale of life-sustaining medical devices. These devices are often used on, or permanently or temporarily implanted in, patients in clinically demanding circumstances, such as operating rooms, emergency units, intensive care and critical care settings, among others. These circumstances, among other factors, can cause the products to become associated with adverse clinical events, including patient mortality and injury, and could lead to product liability claims (including lawsuits seeking class action status or seeking to establish multi-district litigation proceedings) and other litigation, product withdrawals, warning letters, recalls, field corrections or regulatory investigations or enforcement actions relating to one or more of the company's products, any of which could have a material adverse effect on our business, results of operations, financial condition and/or liquidity.

Because actual results are affected by these and other risks and uncertainties, the company cautions investors that actual results may differ materially from those expressed or implied. It is not possible to predict or identify all risks and uncertainties, but the most significant factors, in addition to those addressed above and those described under Item 1A, "Risk Factors," that could adversely affect our business or cause the actual results to differ materially from those expressed or implied include, but are not limited to:

#### **Effective management of and reaction to risks involved in our business, including:**

- the ability to achieve manufacturing or administrative efficiencies, including gross margin benefits from our manufacturing processes and supply chain programs or in connection with the integration of acquired businesses;
- the effects of negative publicity and/or adverse media coverage concerning our products, competitors' products, the geographic or product markets in which we compete or our industry in general, which could result in product withdrawals, decreased product demand or adverse reputational effects and which could reduce market or governmental acceptance of our products;
- the ability to identify appropriate companies, businesses and technologies as potential acquisition candidates, to consummate and successfully integrate such transactions or to obtain agreements for such transactions on favorable terms;
- the reduction in the number of procedures using our devices caused by customers' cost-containment pressures or preferences for alternate therapies;
- the ability to implement, and realize the benefits of, our prior and planned investments in our business, including research and development expenditures focused on new market categories, and our plan to grow in emerging and/or faster-growing markets outside the United States and acquire growth platforms designed to change the mix of our portfolio towards faster, sustainable long-term growth;

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- the uncertainty of whether research and development expenditures and sales force expansion will result in increased sales;
- the ability to reduce exposure and uncertainty related to tax audits, appeals and litigation;
- the risk that the company may not successfully implement its expansion of its Enterprise Resource Planning (“ERP”) information system and other productivity initiatives, including ongoing efforts to outsource certain information technology system functions and services;
- internal factors, such as retention of key employees, including sales force employees;
- the ability to achieve earnings forecasts, which are generated based, among other things, on projected volumes and sales of many product types, some of which are more profitable than others, and projected royalty revenue from Gore;
- changes in factors and assumptions or actual results that differ from our assumptions on stock valuation and employee stock option exercise patterns, which could cause compensation and tax expense recorded in future periods to differ significantly from the compensation expense recorded in the current period;
- changes in factors and assumptions could cause pension cost recorded in future periods to differ from the pension cost recorded in the current period;
- the effect of market fluctuations on the value of assets in the company’s pension plans and the possibility that the company may need to make additional contributions to the plans as a result of any decline in the fair value of such assets;
- damage to a facility where our products are manufactured or from which they are distributed, which could render the company unable to manufacture or distribute one or more products and may require the company to reduce the output of products at the damaged facility thereby making it difficult to meet product shipping targets;
- the potential impairment of goodwill and intangible assets of the company resulting from insufficient cash flow generated from such assets specifically, or our business more broadly, so as to not allow the company to justify the carrying value of the assets;
- the ability to obtain appropriate levels of insurance on reasonable terms, or at all;
- the ability to recover for claims made to our insurance companies or under indemnification obligations to the company and that any amounts recovered under these arrangements may not be adequate to cover the company’s damages and/or costs; and
- the ability to realize the anticipated benefits of our restructuring activities and productivity initiatives to improve the company’s overall cost structure and improve efficiency.

### **Competitive factors, including:**

- the trend of consolidation in the medical device industry as well as among our customers, resulting in potentially greater pricing pressures, competition and more significant and complex contracts than in the past, both in the United States and abroad;
- development of new products or technologies by competitors having superior performance or economic benefit compared to our current products or products under development which could negatively impact sales of our products or render one or more of our products obsolete;
- technological advances, patents and registrations obtained by competitors that would have the effect of excluding the company from new market segments or preventing the company from selling a product or including key features in the company’s products;
- attempts by competitors to gain market share through aggressive marketing programs; and
- reprocessing by third-party reproducers of our products designed and labeled for single use.

**Difficulties and delays inherent in the development, manufacturing, marketing and sale of medical products, including:**

- the ability to complete planned and/or ongoing clinical trials successfully, to develop and obtain regulatory approval for products on a timely basis and to launch products on a timely basis within cost estimates;
- lengthy and costly regulatory approval processes, which may result in lost market opportunities and/or delayed product launches;
- delays or denials of, or grants of low or reduced levels of reimbursement for, procedures using newly developed products;
- the suspension or revocation of authority to manufacture, market or distribute existing products;
- the imposition of additional or different regulatory requirements, such as those affecting manufacturing and labeling;
- performance, efficacy, quality or safety concerns for existing products, whether scientifically justified or not, that may lead to product discontinuations, product withdrawals, recalls, field corrections, regulatory investigations or enforcement actions, litigation or declining sales, including adverse events and/or concerns relating to the company's vena cava filters, pelvic floor repair products and hernia repair products;
- FDA inspections resulting in Form-483 notices and/or warning letters identifying deficiencies in the company's manufacturing practices and/or quality systems; warning letters identifying violations of FDA regulations that could result in product holds, recalls, restrictions on future clearances by the FDA and/or civil penalties; uncertainty regarding the expected date of resolution of any of these matters;
- the failure to obtain, limitations on the use of, or the loss of, patent and other intellectual property rights, and the failure of efforts to protect our intellectual property rights against infringement and legal challenges that can increase our costs;
- difficulties obtaining necessary components or raw materials used in the company's products and/or price increases from the company's suppliers of critical components or raw materials, including oil-based resins, or other interruptions of the supply chain; and
- customers that may limit the number of manufacturers or vendors from which they will purchase products, which can result in the company's inability to sell products to or contract with large hospital systems, integrated delivery networks or group purchasing organizations.

**Governmental action, including:**

- the impact of continued healthcare cost containment;
- new laws and judicial decisions related to healthcare availability, healthcare reform, payment for healthcare products and services or the marketing and distribution of products, including legislative or administrative reforms to the United States Medicare and Medicaid systems or other United States or international reimbursement systems in a manner that would significantly reduce or eliminate reimbursements for procedures that use the company's products;
- changes in the FDA and/or foreign regulatory approval processes that may delay or prevent the approval of new products and result in lost market opportunity;
- the impact of compliance, investigation and enforcement activities affecting the healthcare industry in general or the company in particular (including sales and marketing practices);
- changes in tax laws and long-standing tax principles affecting our business, such as the potential for comprehensive tax reform in the United States, the potential for the imposition of taxes, or increased

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tariffs, on goods produced outside of the United States and imported to the United States, and the impact within multiple jurisdictions resulting from the adoption of Organisation for Economic Co-operation and Development (OECD) policies through its base erosion and profit shifting project;

- changes in environmental laws or standards affecting our business including, among others, compliance with new labeling standards related to ozone-depleting substances;
- changes in laws that could require facility upgrades or process changes and could affect production rates and output; and
- compliance costs and potential penalties and remediation obligations in connection with environmental laws, including regulations regarding air emissions, waste water discharges and solid waste.

### **Legal disputes, including:**

- disputes over legal proceedings, the outcome and the timing of final resolution of the suit filed by Gore against the company;
- product liability claims, which may involve lawsuits seeking class action status or seeking to establish multi-district litigation proceedings, including the Hemia Product Claims, the Women's Health Product Claims and the Filter Product Claims;
- claims asserting securities law violations;
- claims asserting, and/or subpoenas seeking information regarding, violations of law in connection with federal and/or state healthcare programs such as Medicare or Medicaid;
- derivative shareholder actions;
- claims and subpoenas asserting antitrust violations;
- environmental claims, including risks relating to accidental contamination or injury from the use of hazardous materials in the company's manufacturing, sterilization and research activities and the potential for the company to be held liable for any resulting damages; and
- commercial disputes, including disputes over distribution agreements, license agreements, manufacturing/supply agreements, development/research agreements (including indemnification provisions), acquisition or sale agreements, and insurance policies.

### **General economic conditions, including:**

- international and domestic business conditions;
- political or economic instability in foreign countries;
- interest rates;
- foreign currency exchange rates;
- changes in the rate of inflation;
- instability of global financial markets and economies such as have impacted Greece, Italy, Spain, Portugal, Puerto Rico and certain other countries or places where we operate or do business; and
- The United Kingdom's vote to depart the European Union.

**Other factors beyond our control, including catastrophes, both natural and man-made, earthquakes, floods, fires, explosions, strikes, work stoppages or slowdowns, cyberattacks, acts of terrorism or war.**

***Item 7A. Quantitative and Qualitative Disclosures About Market Risk***

Bard operates on a global basis and therefore is subject to the exposures that arise from foreign currency exchange rate fluctuations. The company manages these exposures using operational and economic hedges as well as derivative financial instruments. The company's foreign currency exposures may change over time as changes occur in the company's international operations. The company's objective in managing its exposures to foreign currency fluctuations is to minimize earnings and cash flow volatility associated with assets, liabilities, net investments and probable commitments denominated in foreign currencies. In order to reduce the risk of foreign currency exchange rate fluctuations, the company will from time-to-time enter into derivative financial instruments to hedge a portion of its expected foreign currency denominated cash flow from operations. The instruments that the company uses for hedging are forward contracts and options with major financial institutions. The company expects that the changes in fair market value of such contracts will have a high correlation to the price changes in the related hedged cash flow. The principal currencies the company hedges are the Euro, the Mexican Peso, the Canadian Dollar, and the Japanese Yen. Any gains and losses on these hedge contracts are expected to offset changes in the value of the related exposure. Bard's risk management guidelines prohibit entering into financial instruments for speculative purposes. The company enters into foreign currency transactions only to the extent that foreign currency exposure exists. A sensitivity analysis of changes in the fair value of all foreign exchange derivative contracts at December 31, 2016 indicates that if the U.S. dollar uniformly strengthened by 10% against all currencies, the fair value of these contracts would increase by \$11.3 million, and if the U.S. dollar uniformly weakened by 10% against all currencies, the fair value of these contracts would decrease by \$12.5 million. Any gains and losses on the fair value of derivative contracts would be largely offset by gains and losses on the underlying transactions. These offsetting gains and losses are not reflected in the above analysis.

The company's investment portfolio primarily includes cash equivalents for which the market values are not significantly affected by changes in interest rates. The market value of the company's fixed-rate debt is affected by a change in the medium- to long-term interest rates because the borrowings generally have longer maturities. The market value of the company's fixed-rate debt approximated \$1,688.0 million at December 31, 2016. A sensitivity analysis, assuming a 100 basis point increase or decrease in interest rates and assuming that the debt is held to maturity, indicates that the market value of the debt would have approximated \$1,614.9 million or \$1,766.3 million, respectively, at December 31, 2016. For additional discussion of market risk, see Note 6 of the notes to consolidated financial statements.



*Item 8. Financial Statements and Supplementary Data*

**MANAGEMENT'S REPORT ON  
INTERNAL CONTROL OVER FINANCIAL REPORTING**

Management of the company is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. The company's internal control over financial reporting is 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. The company's internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company;
- 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
- 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.

Management assessed the effectiveness of the company's internal control over financial reporting as of December 31, 2016. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control—Integrated Framework, issued in 2013.

Based on its assessment and those criteria, management believes that the company maintained effective internal control over financial reporting as of December 31, 2016.

The scope of management's assessment of the effectiveness of internal control over financial reporting includes all of C. R. Bard, Inc.'s consolidated operations except for the operations of Liberator Medical Holdings, Inc., which the company acquired on January 21, 2016. Liberator Medical Holdings, Inc.'s operations represent 2.1% of C. R. Bard, Inc.'s consolidated net sales for the year ended December 31, 2016 and assets associated with Liberator Medical Holdings, Inc.'s operations represent 0.4% of C. R. Bard, Inc.'s consolidated total assets as of December 31, 2016.

The company's independent registered public accounting firm has issued an attestation report on the effectiveness of the company's internal control over financial reporting as of December 31, 2016. That report appears on page II-25.

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**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Shareholders  
C. R. Bard, Inc.:

We have audited the accompanying consolidated balance sheets of C. R. Bard, Inc. and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, shareholders' investment, and cash flows for each of the years in the three-year period ended December 31, 2016. In connection with our audits of the consolidated financial statements, we also have audited the consolidated financial statement schedule. These consolidated financial statements and financial statement schedule are the responsibility of C. R. Bard, Inc.'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 C. R. Bard, Inc. and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), C. R. Bard, Inc.'s internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2013, and our report dated February 13, 2017 expressed an unqualified opinion on the effectiveness of C. R. Bard, Inc.'s internal control over financial reporting.

/s/ KPMG LLP  
Short Hills, New Jersey  
February 13, 2017

**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Shareholders  
C. R. Bard, Inc.:

We have audited C. R. Bard, Inc.'s internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2013. C. R. Bard, 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. Our responsibility is to express an opinion on the effectiveness of C. R. Bard, Inc.'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, C. R. Bard, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2013.

The scope of management's assessment of the effectiveness of internal control over financial reporting includes all of C. R. Bard, Inc.'s consolidated operations except for the operations of Liberator Medical Holdings, Inc., which the company acquired on January 21, 2016. Liberator Medical Holdings, Inc.'s operations represent 2.1% of C. R. Bard, Inc.'s consolidated net sales for the year ended December 31, 2016 and assets associated with Liberator Medical Holdings, Inc.'s operations represent 0.4% of C. R. Bard, Inc.'s consolidated total assets as of December 31, 2016. Our audit of internal control over financial reporting of C. R. Bard, Inc. also excluded an evaluation of the internal control over financial reporting of Liberator Medical Holdings, Inc.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of C. R. Bard, Inc. and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, shareholders' investment, and cash flows for each of the years in the three-year period ended December 31, 2016, and our report dated February 13, 2017 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP  
Short Hills, New Jersey  
February 13, 2017

**C. R. BARD, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF INCOME**  
*(dollars in thousands except per share amounts)*

	For the Years Ended December 31,		
	2016	2015	2014
Net sales	\$3,714,000	\$3,416,000	\$3,323,600
Costs and expenses:			
Cost of goods sold	1,371,700	1,301,200	1,258,600
Marketing, selling and administrative expense	1,101,900	1,012,100	981,500
Research and development expense	292,800	259,200	302,000
Interest expense	54,500	44,900	44,800
Other (income) expense, net	229,400	449,200	290,900
Total costs and expenses	<u>3,050,300</u>	<u>3,066,600</u>	<u>2,877,800</u>
Income from operations before income taxes	663,700	349,400	445,800
Income tax provision	<u>132,300</u>	<u>214,000</u>	<u>151,300</u>
Net income	<u>\$ 531,400</u>	<u>\$ 135,400</u>	<u>\$ 294,500</u>
Basic earnings per share available to common shareholders	<u>\$ 7.15</u>	<u>\$ 1.80</u>	<u>\$ 3.83</u>
Diluted earnings per share available to common shareholders	<u>\$ 7.03</u>	<u>\$ 1.77</u>	<u>\$ 3.76</u>

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

**C. R. BARD, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**  
*(dollars in thousands)*

	<u>For the Years Ended December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
Net income	\$531,400	\$ 135,400	\$294,500
Other comprehensive income (loss)			
Change in derivative instruments designated as cash flow hedges, net of tax	(1,200)	(9,600)	900
Foreign currency translation adjustments	(21,800)	(91,100)	(50,400)
Benefit plan adjustments, net of tax	(4,500)	(18,500)	(18,400)
Other comprehensive income (loss)	<u>(27,500)</u>	<u>(119,200)</u>	<u>(67,900)</u>
Comprehensive income	<u>\$503,900</u>	<u>\$ 16,200</u>	<u>\$226,600</u>

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

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**C. R. BARD, INC. AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
*(dollars in thousands except share and per share amounts)*

	December 31,	
	2016	2015
<b>ASSETS</b>		
Current assets		
Cash and cash equivalents	\$ 905,000	\$ 950,500
Restricted cash	201,500	80,400
Accounts receivable, less allowances of \$7,200 and \$7,500, respectively	477,300	445,100
Inventories	483,000	413,700
Other current assets	249,600	79,600
Total current assets	<u>2,316,400</u>	<u>1,969,300</u>
Property, plant and equipment, at cost:		
Land	19,200	19,500
Buildings and improvements	322,900	304,500
Machinery and equipment	505,000	483,800
	<u>847,100</u>	<u>807,800</u>
Less accumulated depreciation and amortization	357,600	335,400
Net property, plant and equipment	489,500	472,400
Goodwill	1,260,500	1,140,600
Core and developed technologies, net	686,400	744,300
Other intangible assets, net	323,600	274,800
Deferred tax assets	64,400	50,500
Other assets	165,300	192,100
Total assets	<u>\$5,306,100</u>	<u>\$4,844,000</u>
<b>LIABILITIES AND SHAREHOLDERS' INVESTMENT</b>		
Current liabilities		
Short-term borrowings and current maturities of long-term debt	\$ —	\$ 250,200
Accounts payable	96,000	70,700
Accrued expenses	809,500	728,900
Accrued compensation and benefits	186,100	187,900
Income taxes payable	17,300	23,000
Total current liabilities	<u>1,108,900</u>	<u>1,260,700</u>
Long-term debt	1,641,700	1,144,100
Other long-term liabilities	861,500	936,700
Deferred tax liabilities	18,900	47,200
Commitments and contingencies		
Shareholders' investment:		
Preferred stock, \$1 par value, authorized 5,000,000 shares; none issued	—	—
Common stock, \$.25 par value, authorized 600,000,000 shares in 2016 and 2015; issued and outstanding 72,899,251 shares in 2016 and 73,697,371 shares in 2015	18,200	18,400
Capital in excess of par value	2,346,800	2,148,400
Accumulated deficit	(454,400)	(503,500)
Accumulated other comprehensive loss	(235,500)	(208,000)
Total shareholders' investment	<u>1,675,100</u>	<u>1,455,300</u>
Total liabilities and shareholders' investment	<u>\$5,306,100</u>	<u>\$4,844,000</u>

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

**C. R. BARD, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF SHAREHOLDERS' INVESTMENT**  
(dollars in thousands except share and per share amounts)

	Common Stock		Capital In Excess Of Par Value	Accumulated Deficit / Retained Earnings	Accumulated Other Comp. (Loss) Inc.	Total
	Shares	Amount				
Balance at December 31, 2013	77,436,263	\$ 19,400	\$ 1,729,600	\$ 360,100	\$ (20,900)	\$ 2,088,200
Net income	—	—	—	294,500	—	294,500
Total other comprehensive loss	—	—	—	—	(67,900)	(67,900)
Cash dividends declared (\$0.87 per share)	—	—	—	(66,400)	—	(66,400)
Issuance of common stock	1,954,647	400	108,900	—	—	109,300
Share-based compensation	—	—	71,600	—	—	71,600
Purchases of common stock	(4,497,427)	(1,100)	—	(658,500)	—	(659,600)
Tax benefit relating to share-based compensation plans	—	—	35,200	—	—	35,200
<b>Balance at December 31, 2014</b>	<b>74,893,483</b>	<b>\$ 18,700</b>	<b>\$ 1,945,300</b>	<b>\$ (70,300)</b>	<b>\$ (88,800)</b>	<b>\$ 1,804,900</b>
Net income	—	—	—	135,400	—	135,400
Total other comprehensive loss	—	—	—	—	(119,200)	(119,200)
Cash dividends declared (\$0.94 per share)	—	—	—	(70,600)	—	(70,600)
Issuance of common stock	1,549,177	400	76,900	—	—	77,300
Share-based compensation	—	—	81,800	—	—	81,800
Purchases of common stock	(2,745,289)	(700)	—	(498,000)	—	(498,700)
Tax benefit relating to share-based compensation plans	—	—	44,400	—	—	44,400
<b>Balance at December 31, 2015</b>	<b>73,697,371</b>	<b>\$ 18,400</b>	<b>\$ 2,148,400</b>	<b>\$ (503,500)</b>	<b>\$ (208,000)</b>	<b>\$ 1,455,300</b>
Net income	—	—	—	531,400	—	531,400
Total other comprehensive loss	—	—	—	—	(27,500)	(27,500)
Cash dividends declared (\$1.02 per share)	—	—	—	(75,900)	—	(75,900)
Issuance of common stock	1,201,880	300	67,300	—	—	67,600
Share-based compensation	—	—	90,000	—	—	90,000
Purchases of common stock	(2,000,000)	(500)	—	(406,400)	—	(406,900)
Tax benefit relating to share-based compensation plans	—	—	41,100	—	—	41,100
<b>Balance at December 31, 2016</b>	<b>72,899,251</b>	<b>\$ 18,200</b>	<b>\$ 2,346,800</b>	<b>\$ (454,400)</b>	<b>\$ (235,500)</b>	<b>\$ 1,675,100</b>

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



**C. R. BARD, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
*(dollars in thousands)*

	For the Years Ended December 31,		
	2016	2015	2014
<b>Cash flows from operating activities:</b>			
Net income	\$ 531,400	\$ 135,400	\$ 294,500
Adjustments to reconcile net income to net cash provided by operating activities, net of acquired businesses:			
Depreciation and amortization	213,400	193,100	174,100
Litigation charges, net	204,900	588,000	268,900
Restructuring and productivity initiative costs, net of payments	5,000	22,500	9,800
Asset impairments	1,200	4,500	6,800
Settlement of pre-existing relationship related to Medicon	—	49,600	—
Gain on previously held ownership share of Medicon	—	(25,500)	—
Gain on sale of investment	—	—	(7,100)
Acquired in-process research and development	—	—	2,600
Deferred income taxes	(65,400)	(45,100)	(26,900)
Share-based compensation	90,000	81,800	71,400
Inventory reserves and provision for doubtful accounts	24,000	27,400	23,300
Other items	(1,700)	4,200	4,200
Changes in assets and liabilities, net of acquired businesses:			
Accounts receivable	(25,100)	(18,000)	21,300
Inventories	(83,700)	(33,100)	(53,900)
Current liabilities	(318,800)	(217,300)	(35,000)
Taxes	(12,900)	22,600	(105,500)
Other, net	(15,700)	8,000	11,500
Net cash provided by operating activities	<u>546,600</u>	<u>798,100</u>	<u>660,000</u>
<b>Cash flows from investing activities:</b>			
Capital expenditures	(100,300)	(102,900)	(126,600)
Change in restricted cash	(121,100)	(31,200)	(31,200)
Payments made for purchases of businesses, net of cash acquired	(202,800)	(97,400)	—
Payments made for intangibles	(900)	(900)	(13,300)
Proceeds from sale of financial instruments and other investments	—	21,000	7,100
Other	1,200	—	700
Net cash used in investing activities	<u>(423,900)</u>	<u>(211,400)</u>	<u>(163,300)</u>
<b>Cash flows from financing activities:</b>			
Change in short-term borrowings, net	—	(78,000)	78,000
Proceeds from issuance of long-term debt, net	495,600	—	—
Payments of long-term debt	(250,000)	(4,000)	—
Proceeds from exercises under share-based compensation plans, net	50,900	58,700	98,400
Excess tax benefit relating to share-based compensation plans	41,400	44,200	35,200
Purchases of common stock	(406,900)	(498,700)	(659,600)
Dividends paid	(74,600)	(69,400)	(66,200)
Payments of contingent and deferred consideration	(6,200)	(6,900)	(70,200)
Net cash used in financing activities	<u>(149,800)</u>	<u>(554,100)</u>	<u>(584,400)</u>
Effect of exchange rate changes on cash and cash equivalents	(18,400)	(42,200)	(19,100)
Decrease in cash and cash equivalents during the year	<u>(45,500)</u>	<u>(9,600)</u>	<u>(106,800)</u>
Balance at January 1	950,500	960,100	1,066,900
Balance at December 31	<u>\$ 905,000</u>	<u>\$ 950,500</u>	<u>\$ 960,100</u>
<b>Supplemental cash flow information</b>			
<b>Cash paid for:</b>			
Interest	\$ 50,200	\$ 42,800	\$ 42,700
Income taxes	169,200	192,300	248,500
<b>Non-cash transactions:</b>			
Dividends declared, not paid	\$ 19,300	\$ 18,000	\$ 16,800
Purchases of businesses and related costs	17,100	69,000	3,000

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

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**1. Significant Accounting Policies**

*Nature of Operations* - C. R. Bard, Inc. and its subsidiaries (the “company” or “Bard”) are engaged in the design, manufacture, packaging, distribution and sale of medical, surgical, diagnostic and patient care devices. The company markets its products worldwide to hospitals, individual healthcare professionals, extended care facilities and alternate site facilities.

*Consolidation* - The consolidated financial statements include the accounts of C. R. Bard, Inc. and its subsidiaries. All significant intercompany accounts and transactions are eliminated in consolidation. The accounts of most foreign subsidiaries are consolidated as of November 30. No events occurred related to these foreign subsidiaries during the months of December 2016, 2015 or 2014 that materially affected the financial position or results of operations of the company. The company has no material interests in variable interest entities and none that require consolidation.

*Use of Estimates in the Preparation of Financial Statements* - The preparation of these financial statements in conformity with accounting principles generally accepted in the United States requires the company to make estimates and judgments that affect reported amounts of assets, liabilities, revenues and expenses, and the related disclosure of contingent assets and liabilities at the date of the financial statements. The company evaluates these estimates and judgments on an ongoing basis and bases its estimates on historical experience, current conditions and various other assumptions that are believed to be reasonable under the circumstances. The results of these estimates form the basis for making judgments about the carrying values of assets and liabilities as well as identifying and assessing the accounting treatment with respect to commitments and contingencies. Actual results may differ from these estimates under different assumptions or conditions.

*Foreign Currency* - Net assets of foreign subsidiaries are translated into U.S. dollars at current year-end rates, and revenues, costs and expenses are translated at average monthly rates during each monthly period. Net exchange gains or losses resulting from the translation of foreign financial statements and the effect of exchange rate changes on intercompany transactions of a long-term investment nature are accumulated and credited or charged directly to a separate component of shareholders’ investment. Any foreign currency gains or losses related to monetary assets are charged to other (income) expense, net.

*Revenue Recognition* - The company’s net sales represent gross sales invoiced to both end-user customers and independent distributors, less certain related charges, including discounts, returns, rebates and other allowances. The company recognizes product revenue when persuasive evidence of a sales arrangement exists, title and risk of loss have transferred, the selling price is fixed or determinable, contractual obligations have been satisfied and collectibility is reasonably assured. Generally, sales to end-user customers and European distributors are recognized at the point of delivery, and sales to domestic distributors are recognized at the time of shipment. In certain circumstances, end-user customers may require the company to maintain consignment inventory at the customer’s location. In the case of consignment inventories, revenue and associated cost are recognized upon the notification of usage by the customer.

Royalty revenue is recognized as earned in accordance with the contract terms when royalty revenue can be objectively determined. If royalty revenue cannot be objectively determined during the quarterly period in which it is earned, then royalty revenue is recognized in the following quarterly period when objective evidence is obtained and the revenue becomes fixed and determinable.

Charges for discounts, returns, rebates and other allowances are recognized as a deduction from revenue on an accrual basis in the period in which the revenue is recorded. The accrual for product returns, discounts and other allowances is based on the company’s history. The company allows customers to return defective or

**C. R. BARD, INC. AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

damaged products. Historically, product returns have not been material. The company grants sales rebates to independent distributors based upon the distributor's reporting of end-user sales and pricing. Sales rebates are accrued by the company in the period in which the sale is recorded. The company's rebate accrual is based on its history of actual rebates paid. In estimating rebate accruals, the company considers the lag time between the point of sale and the payment of the distributor's rebate claim, distributor-specific trend analysis and contractual commitments including stated rebate rates. The company's reserves for rebates are reviewed at each reporting period and adjusted to reflect data available at that time. The company adjusts reserves to reflect any differences between estimated and actual amounts. Such adjustments impact the amount of net product sales revenue recognized by the company in the period of adjustment.

*Shipping and Handling Costs* - Shipping and handling costs are included in cost of goods sold.

*Advertising Costs* - Costs related to advertising are expensed as incurred. Advertising expense was \$20.8 million, \$4.8 million and \$4.4 million in 2016, 2015 and 2014, respectively, and is included in marketing, selling and administrative expense.

*Research and Development* - Research and development expense is comprised of costs related to internal research and development activities, milestone payments for third-party research and development activities, and acquired in-process research and development ("IPR&D") arising from acquisitions not accounted for as a business combination. IPR&D arising from a business combination are accounted for as indefinite-lived intangible assets, subject to impairment testing until completion or abandonment of a project. Upon successful completion, a separate determination will be made as to the useful life of the asset and amortization will begin.

*Share-Based Compensation* - Share-based compensation cost is measured at the grant date based on the fair value of the award. Generally, compensation expense is recognized on a straight-line basis over the vesting period.

*Cash Equivalents* - Cash equivalents consist of highly liquid investments purchased with an original maturity of three months or less and amounted to \$623.2 million and \$615.4 million at December 31, 2016 and 2015, respectively.

*Accounts Receivable* - In addition to trade receivables, accounts receivable included \$20.5 million and \$20.7 million of non-trade receivables at December 31, 2016 and 2015, respectively.

*Inventories* - Inventories are stated at the lower of cost or market. Cost is determined using the first-in, first-out method.

*Depreciation* - Depreciation is provided over the estimated useful lives of depreciable assets using the straight-line method. The estimated useful lives primarily range from three to 40 years for buildings and improvements and three to 20 years for machinery and equipment. Depreciation expense was \$69.9 million, \$62.3 million and \$56.8 million in 2016, 2015 and 2014, respectively.

*Software Capitalization and Amortization* - Internally used software, whether purchased or developed, is capitalized and amortized using the straight-line method over an estimated useful life of five to seven years. Capitalized software costs are included in machinery and equipment. The company capitalizes certain costs associated with internal-use software such as the payroll costs of employees devoting time to the projects and external direct costs for materials and services. Costs associated with internal-use software are expensed during the design phase until the point at which the project has reached the application development stage. Subsequent

**C. R. BARD, INC. AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

additions, modifications or upgrades to internal-use software are capitalized only to the extent that they allow the software to perform a task it previously did not perform. Software maintenance and training costs are expensed in the period in which they are incurred. The company capitalized \$16.4 million, \$17.1 million and \$21.2 million of internal-use software for the years ended December 31, 2016, 2015 and 2014, respectively. Amortization expense for capitalized software was \$13.0 million, \$11.3 million and \$8.5 million in 2016, 2015 and 2014, respectively.

*Goodwill* - Goodwill is tested for impairment annually at December 31 or more frequently if impairment indicators arise using a fair value based test. The company assigns goodwill recorded in connection with acquisitions to its four reporting units, each of which is one level below the company's single reporting segment. The fair value of each reporting unit is calculated and compared to its carrying value. In determining the fair value of each reporting unit, the company uses a weighted-average combination of both market and income approaches. The market approach to estimating fair value is based primarily on applying external market information to a historical earnings measure. The income approach to estimating fair value is based on a discounted value of estimated future cash flows of the reporting unit. If the carrying amount of a reporting unit exceeds its fair value, then the company will record an impairment charge for the excess of the carrying value of goodwill over its implied fair value.

*Other Intangible Assets* - Other intangible assets with finite lives are amortized on a straight-line basis over their estimated useful lives ranging from five to 22 years with a weighted average of 13 years. When events or circumstances indicate that the carrying amount of intangible assets may not be recoverable, the company will assess recoverability from future operations using undiscounted cash flows derived from the lowest appropriate asset groupings. To the extent carrying value exceeds the undiscounted cash flows, impairments are recognized in operating results to the extent that the carrying value exceeds the fair value, which is determined based on the net present value of estimated future cash flows.

*Income Taxes* - Deferred tax assets and liabilities are recognized based on the expected future tax consequences of temporary differences between the carrying amounts of assets and liabilities for financial and income tax reporting purposes. The company regularly assesses its tax positions to determine whether the benefits of tax positions are more likely than not of being sustained upon audit. These positions relate to transfer pricing, the deductibility of certain expenses, intercompany transactions, state taxes and other matters. Although the outcome of tax audits is uncertain, provisions for income taxes have been made for potential liabilities resulting from such matters. Any reserves are adjusted once the statutes of limitation have expired or the tax position is remeasured or effectively settled. The company's policy is to classify interest and penalties related to unrecognized tax positions as income tax expense.

*Income Statement Presentation of Taxes Collected from Customers and Remitted to Government Authorities* - The company follows a net basis policy with regard to sales, use, value added or any other tax collected from customers and remitted to government authorities, which excludes them from both net sales and expenses.

*Treasury Stock* - The company accounts for treasury stock purchases as retirements by reducing retained earnings for the cost of the repurchase. Issuances of previously repurchased shares are accounted for as new issuances. There were 43.9 million and 43.1 million of previously repurchased shares at December 31, 2016 and 2015, respectively.

*Derivative Instruments* - The company recognizes all derivative instruments at fair value on a gross basis in its consolidated balance sheets. Changes in fair value of derivative instruments are recorded in each period in current earnings or accumulated other comprehensive loss depending on whether the derivative instrument is designated as part of a hedged transaction, and if so, the type of hedge transaction.

**C. R. BARD, INC. AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The company's objective in managing its exposures to foreign currency fluctuations is to minimize earnings and cash flow volatility associated with future intercompany receivables and payables denominated in foreign currencies. These risks are managed using derivative instruments, mainly through forward currency and option contracts. The company does not utilize derivative instruments for trading or speculative purposes. None of these derivative instruments extend beyond June 2018. All of these derivative instruments are designated and qualify as cash flow hedges. The effective portion of the changes in fair value of the derivative instruments' gains or losses are reported as a component of accumulated other comprehensive loss and reclassified into earnings on the same line item associated with the forecasted transaction and in the same period or periods when the forecasted transaction affects earnings. At December 31, 2016, all of these derivative instruments were highly effective hedging instruments because they were denominated in the same currency as the hedged item and because the maturities of the derivative instruments matched the timing of the hedged items.

When applicable, foreign currency exposures that arise from remeasuring intercompany loans denominated in currencies other than the functional currency are mitigated through the use of forward contracts. Hedges of these foreign exchange exposures are not designated as hedging instruments for accounting purposes. The gains or losses on these instruments are recognized in earnings and are effectively offset by the gains or losses on the underlying hedged items.

The company may use interest rate swap contracts to manage its net exposure to interest rates on its long-term debt. Under its interest rate swap contract, the company exchanged, at specified intervals, the difference between fixed and floating interest rates calculated by reference to a notional principal amount of these notes. The company's swap contract was designated and qualified as a fair value hedge. Changes in the fair value of the swap contract offset changes in the fair value of the fixed rate debt due to changes in market interest rates. The company's interest rate swap contract was settled concurrent with the maturity of the 2.875% fixed-rate notes in January 2016.

The company may use forward starting interest rate swap contracts which are intended to manage its exposure to interest rate volatility in anticipation of issuing fixed-rate debt. The effective portion of the changes in fair value are reported as a component of accumulated other comprehensive loss and are then reclassified into interest expense over the term of the related debt beginning in the period in which the planned debt issuance occurs and the related forward starting swap contract is settled. The company's forward starting interest rate swap contract was designated and qualified as a cash flow hedge. This contract was settled concurrent with the issuance of the 3.000% senior unsecured notes due 2026 ("3.000% Notes due 2026") in May 2016.

*Reclassifications* – Certain prior year amounts have been reclassified to conform to the current year presentation.

*Recently Adopted Accounting Pronouncement* – In November 2015, the Financial Accounting Standards Board ("FASB") issued an accounting standard update that simplifies the balance sheet classification of deferred taxes. This update requires all deferred tax assets and liabilities to be reported as non-current in the consolidated balance sheets. The company elected to adopt this update early in the fourth quarter of 2016. See Note 4 of the notes to consolidated financial statements.

In June 2015, the FASB issued an accounting standard update that contains amendments that will affect a wide variety of topics in the accounting standards codification. One of the amendments include a clarification that an equity security has a readily determinable fair value if it meets certain conditions, which include the fair value of an equity security that is an investment in a mutual fund or in a structure similar to a mutual fund is readily determinable if the fair value per share is determined and published and is the basis for current transactions. In 2016, the company adopted this provision of this update and applied the provision retrospectively to 2015. See Note 12 of the notes to the consolidated financial statements.

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

In April 2015, the FASB issued an accounting standard update that requires debt issuance costs to be presented as a direct deduction from the carrying amount of the related debt rather than as an asset. In 2016, the company adopted this update. See Note 9 of the notes to consolidated financial statements.

*New Accounting Pronouncements Not Yet Adopted* – In January 2017, the FASB issued an accounting standard update that clarifies the definition of a business by providing a more robust framework to evaluate whether transactions should be accounted for as an acquisition of assets or business. This update is expected to reduce the number of transactions that will be accounted for as an acquisition of a business. The effects of this update will depend on future acquisitions. The company intends to adopt this standard early as of the beginning of Bard's 2017 fiscal year.

In November 2016, the FASB issued an accounting standard update that requires the change in the total of cash, cash equivalents, and restricted cash to be shown in the statement of cash flows. As a result, transfers between cash, cash equivalents, and restricted cash will no longer be presented in the statement of cash flows. This update will be effective as of the beginning of Bard's 2018 fiscal year, with early adoption permitted. Other than the impact of this change on the statements of cash flows, this update is not expected to have a material impact on the company's consolidated financial statements.

In October 2016, the FASB issued an accounting standard update that requires the immediate recognition of the income tax effects of intra-entity transfers of assets other than inventory at the time of the transfer. This update will be effective as of the beginning of Bard's 2018 fiscal year, with early adoption permitted at the beginning of an annual period. The company is assessing the impact of inter-entity transfers on the company's consolidated financial statements.

In March 2016, the FASB issued an accounting standard update that includes multiple provisions intended to simplify various aspects of the accounting for share-based payments, including the income tax items and the classification of these items on the statement of cash flows. This update will be effective as of the beginning of Bard's 2017 fiscal year. This standard will result in the recognition of excess income tax benefits to the consolidated statements of income upon settlement of share-based compensation awards, which is largely dependent on the exercise/vesting of awards and variables such as the company's stock price at the time of the exercise/vesting of awards and the exercise price of the underlying awards. Other than the recognition of excess income tax benefits which may be material to the consolidated statements of income and the classification of these items on the statements of cash flows, this update is not expected to have a material impact on the company's consolidated financial statements.

In February 2016, the FASB issued a new accounting standard to use in the accounting for leases. The new standard will require, among other items, lessees to recognize most leases on the balance sheet by recording a right-of-use asset and a lease liability. This standard will be effective as of the beginning of Bard's 2019 fiscal year. Other than this impact to the company's consolidated balance sheet, the new standard is not expected to have a material impact on the company's consolidated financial statements.

In May 2014, the FASB issued a new accounting standard that provides for a comprehensive model to use in the accounting for revenue arising from contracts with customers. Under this standard, revenue will be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In August 2015, the FASB issued an accounting standard update to defer this standard's effective date for one year, which will now begin with Bard's 2018 fiscal year. Under this standard, the company expects to recognize royalty revenue in earlier periods than under its current policy, and for other contracts that do not meet the new criteria for recognizing revenue over time. In addition, revenue will be recognized in earlier periods, where the company

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

maintains risk of loss for products that are in-transit to the customer. The company has made substantial progress in its evaluation of the new standard, and other than these items, this standard is not expected to have a material impact on the company's consolidated financial statements. The company will continue to assess the new standard, as well as updates to the standard that have been proposed by the FASB. The company intends to adopt the standard under the modified retrospective approach beginning with Bard's 2018 fiscal year.

**2. Acquisitions**

The company acquires businesses, products and technologies to augment its existing product lines and from time-to-time may divest businesses or product lines for strategic reasons. Unaudited pro forma financial information has not been presented because the effects of acquisitions were not material on either an individual or aggregate basis.

*Acquisitions*

On January 21, 2016, the company acquired all of the outstanding shares of Liberator Medical Holdings, Inc. ("Liberator"), a publicly-held direct-to-consumer distributor of urological catheters, ostomy supplies, mastectomy fashions and diabetic medical supplies for a purchase price of \$181.1 million. This acquisition enhanced the company's position in the home healthcare market in the United States. The acquisition was accounted for as a business combination, and the results of operations have been included in the company's results since the acquisition date. The fair value of the assets acquired and the liabilities assumed results in the recognition of: customer relationships of \$53.0 million; other intangibles of \$26.0 million, primarily consisting of a trade name and non-compete agreements; deferred tax liabilities of \$31.6 million, primarily associated with intangible assets; and other net assets of \$11.9 million. The excess of the purchase price over fair value of the acquired net assets was recorded as goodwill of \$121.8 million. The goodwill recognized includes the value of expected market expansion in the home healthcare market through Liberator's direct-to-consumer capabilities that provide additional opportunity for market penetration. Additionally, synergies are expected to result from the alignment of sales call points within the company's sales organization. The goodwill is not deductible for tax purposes. Customer relationships and other intangible assets are being amortized over their weighted average estimated useful lives of approximately 12 years and 8 years, respectively.

On December 3, 2015, the company, through a wholly-owned foreign subsidiary, acquired all of the outstanding shares of Embo Medical Limited ("Embo"), a privately-held company headquartered in Galway, Ireland, specializing in the development of peripheral embolization devices. The total purchase consideration included an up-front cash payment of \$21.0 million and the fair value of future additional milestone payments of up to \$22.5 million that are contingent upon specific regulatory and revenue-related milestones being achieved, which had a fair value of \$16.6 million as of the acquisition date. The acquisition was recognized in the first quarter of 2016 for this foreign subsidiary. The fair value of the assets acquired and the liabilities assumed resulted in the recognition of: an IPR&D asset of \$36.1 million related to the development of the Caterpillar™ vascular plug device; goodwill of \$4.4 million; and other net liabilities of \$2.9 million. The goodwill is not deductible for tax purposes. The fair value of the IPR&D asset was determined based upon the present value of expected future cash flows adjusted for the probability of technological and regulatory success, utilizing a risk-adjusted discount rate of 17.5%. The fair value of the future contingent consideration was determined utilizing a probability weighted cash flow estimate adjusted for the expected timing of the payment.

On November 2, 2015, the company acquired Kobayashi Pharmaceutical Co., Ltd.'s ("Kobayashi") 50% ownership share in Medicon, Inc. ("Medicon"), through a share redemption (the "Medicon Acquisition"). Medicon was a joint venture company equally-owned by the company and Kobayashi and was a distributor of

**C. R. BARD, INC. AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Bard's products in Japan. As a result of the Medicon Acquisition, the company now owns 100% of the outstanding shares of Medicon. The acquisition provides the company with greater control over its operations in Japan. The total consideration of \$138.0 million, denominated in Japanese Yen, included an up-front cash payment of approximately \$24.9 million at closing; the present value of future payments totaling approximately \$65.8 million; settlement of an accounts receivable balance due from Medicon of \$42.0 million; and the fair value of an off-market supply contract of \$5.3 million. The future payments will be paid in Japanese Yen over a 10 year period, subject to exchange rate fluctuations. The liability for future payments was \$52.3 million, of which \$39.5 million was recorded to other long-term liabilities, and \$66.0 million, of which \$50.3 million was recorded to other long-term liabilities, at December 31, 2016 and 2015, respectively. The company will make future payments of \$41.0 million over the next five years.

The fair value of the purchase consideration for the Medicon Acquisition was \$88.4 million. In addition, the company recorded an expense of \$49.6 million (\$33.5 million after tax) to other (income) expense, net, related to the settlement of a pre-existing contractual relationship, which included a management fee provision. The settlement amount was calculated as the present value of the differential between the forecasted payments under the pre-existing contract and those of an at-market contract. Immediately prior to the Medicon Acquisition, the fair value of the company's existing 50% ownership share in Medicon of \$46.4 million was determined using the present value of expected future cash flows. In connection with the fair value measurement of this ownership share, the company recorded a gain of \$25.5 million to other (income) expense, net.

The Medicon Acquisition was accounted for as a business combination, and the results of operations have been included in the company's results since the acquisition date. The fair value of the assets acquired and the liabilities assumed results in the recognition of: customer relationships of \$13.0 million; other intangible assets of \$4.0 million, primarily related to regulatory assets; other net assets of \$93.0 million, primarily consisting of inventory, accounts receivable, financial instruments, and pension obligations; and deferred tax liabilities of \$8.8 million, primarily associated with intangible assets. An IPR&D asset of \$11.9 million was recorded for the ongoing clinical trials required to obtain regulatory approval for certain of Bard's products in the Japanese health care market. The fair value of the IPR&D asset was determined utilizing the replacement cost method. The excess of the purchase price over fair value of the acquired net assets was recorded as goodwill of \$21.7 million. The goodwill recognized includes the value of Medicon's assembled workforce and expected other cost synergies. A portion of the goodwill is deductible for tax purposes. Customer relationships and other intangibles assets are being amortized over their weighted average estimated useful lives of approximately 12 years and 10 years, respectively. The company incurred acquisition-related transaction costs of \$2.4 million, which were expensed to marketing, selling and administrative expense.

Prior to the Medicon Acquisition, the company accounted for the joint venture under the equity method of accounting. The company recorded sales to Medicon of \$139.6 million for the period from January 1, 2015 through November 1, 2015 and \$156.3 million for the year ended 2014. The company eliminated the intercompany profits on sales to Medicon until Medicon sold the company's products to a third party. The company recorded equity losses of \$0.4 million for the period from January 1, 2015 through November 1, 2015 and \$0.3 million for the year ended 2014. There were no dividends received from Medicon in 2015. The company received dividends from Medicon of \$1.5 million for the year ended December 31, 2014.

On July 1, 2015, the company acquired all of the outstanding shares of Vascular Pathways, Inc. ("VPI"), a privately-held developer and supplier of vascular access devices. VPI manufactures the AccuCath® Intravenous Catheter System, a United States Food and Drug Administration cleared device that enables rapid and safe peripheral intravenous ("PIV") insertion. This acquisition allows the company to expand its wire-assist PIV technology platform to address unmet clinical needs and will supplement its intellectual property portfolio for



**C. R. BARD, INC. AND SUBSIDIARIES****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

wire-assist vascular access devices. The total purchase consideration of \$81.5 million included the fair value of future contingent consideration of up to \$15 million, which is based on specific revenue-based and manufacturing-related milestones. The fair value of the future contingent consideration was determined by utilizing a probability weighted cash flow estimate adjusted for the expected timing of the payment and was not material as of the acquisition date. The acquisition was accounted for as a business combination, and the results of operations have been included in the company's results since the acquisition date. The fair value of the assets acquired and the liabilities assumed results in the recognition of: developed technologies of \$65.0 million; deferred tax liabilities of \$24.8 million, primarily associated with intangible assets; deferred tax assets of \$9.9 million, consisting primarily of net operating loss carryforwards; and other net liabilities of \$11.0 million. The excess of the purchase price over fair value of the acquired net assets was recorded as goodwill of \$42.4 million. The goodwill recognized includes the value of future product applications for wire-assist vascular access devices that did not meet the criteria for separate recognition of IPR&D and provides for call point synergies within the company's sales organization. The goodwill is not deductible for tax purposes. Developed technologies are being amortized over their estimated useful lives of approximately 12 years. The company incurred acquisition-related transaction costs of \$2.2 million, of which \$1.2 million were expensed to marketing, selling and administrative expense and \$1.0 million were expensed to research and development expense.

**3. Asset Impairments**

During 2016, the company recorded \$1.2 million (\$1.2 million after tax) to cost of goods sold for the impairment of a prepaid asset. During 2015 and 2014, the company recorded \$4.5 million (\$2.8 million after tax) and \$6.8 million (\$4.3 million after tax), respectively, to research and development expense for the impairment of IPR&D projects, primarily due to changes in cash flow assumptions.

Asset impairment charges were measured at fair value using significant unobservable inputs that are categorized as Level 3 under the fair value hierarchy, which is described further in Note 6 of the notes to consolidated financial statements.

**4. Income Taxes**

The components of income from operations before income taxes for the following years ended December 31 consisted of:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
(dollars in millions)			
United States	\$268.1	\$ 550.3	\$344.3
Foreign	395.6	(200.9)	101.5
	<u>\$663.7</u>	<u>\$ 349.4</u>	<u>\$445.8</u>

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The income tax provision for the following years ended December 31 consisted of:

(dollars in millions)	<u>2016</u>	<u>2015</u>	<u>2014</u>
<b>Current provision</b>			
Federal	\$132.3	\$196.8	\$130.1
Foreign	44.5	40.8	32.3
State	20.9	21.5	15.8
	<u>197.7</u>	<u>259.1</u>	<u>178.2</u>
<b>Deferred (benefit) provision</b>			
Federal	(62.1)	(18.3)	(17.8)
Foreign	4.4	(26.5)	(3.9)
State	(7.7)	(0.3)	(5.2)
	<u>(65.4)</u>	<u>(45.1)</u>	<u>(26.9)</u>
	<u>\$132.3</u>	<u>\$214.0</u>	<u>\$151.3</u>

Deferred tax assets and deferred tax liabilities at December 31 consisted of:

(dollars in millions)	<u>2016</u>	<u>2015</u>
<b>Deferred tax assets</b>		
Employee benefits	\$184.2	\$180.1
Inventory	12.4	12.2
Receivables and rebates	31.7	29.6
Accrued expenses	259.8	165.2
Loss carryforwards and credits	77.7	81.4
Other	2.5	—
Gross deferred tax assets	568.3	468.5
Valuation allowance	(53.3)	(51.1)
	515.0	417.4
<b>Deferred tax liabilities</b>		
Intangibles	346.2	338.8
Accelerated depreciation	16.9	16.3
Receivables and other	106.4	59.0
	<u>469.5</u>	<u>414.1</u>
	<u>\$ 45.5</u>	<u>\$ 3.3</u>

As discussed in Note 1 of the notes to consolidated financial statements, the company retrospectively adopted an accounting standard update early. This update requires all deferred tax assets and liabilities to be reported as non-current in the consolidated balance sheets. The adoption of this update had the following impact on the 2015 consolidated balance sheet amounts as previously reported: short-term deferred tax assets decreased by \$123.9 million, deferred tax assets increased by \$28.7 million, accrued expenses decreased by \$1.1 million and deferred tax liabilities decreased by \$94.1 million.

At December 31, 2016, the company had federal net operating loss carryforwards of \$34.3 million, which expire between 2027 and 2036, state net operating loss carryforwards of \$415.2 million, which expire between

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

2017 and 2037, foreign net operating loss carryforwards of \$158.4 million, which expire between 2018 and 2027, and foreign net operating loss carryforwards of \$24.5 million with an indefinite life. The company also had various tax credits of \$11.5 million with an indefinite life and \$12.3 million that expire between 2018 and 2033.

The company records valuation allowances to reduce its deferred tax assets to the amount that it believes is more likely than not to be realized. The company considers future taxable income and the periods over which it must be earned in assessing the need for valuation allowances. In the event the company determines it would not be able to realize all or part of its net deferred tax assets in the future, an adjustment to the deferred tax assets would be charged to expense in the period such determination was made. At December 31, 2016, the valuation allowance primarily related to state and foreign net operating loss carryforward and credits, and to certain other state deferred tax assets.

A reconciliation between the effective income tax rate and the federal statutory rate for the following years ended December 31 is:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Federal statutory rate	35%	35%	35%
State taxes, net of federal benefit	1%	4%	2%
Operations taxed at other than U.S. rate	(13)%	24% <sup>(A)</sup>	(2)% <sup>(A)</sup>
Research and development tax credit	(1)%	(2)%	(1)%
Other	(2)%	—	—
	<u>20%</u>	<u>61%</u>	<u>34%</u>

<sup>(A)</sup> Includes the tax effects of litigation charges, net, which consist primarily of product liability claims allocated to a low tax jurisdiction.

The company's foreign tax incentives consist of incentive tax grants in Malaysia and Puerto Rico. The company's grant in Malaysia expired during 2015 and the company's grant in Puerto Rico will expire in 2028. The approximate dollar and per share effects of the Malaysian and Puerto Rican tax grants were as follows:

	<u>2016</u>	<u>2015<sup>(A)</sup></u>	<u>2014<sup>(A)</sup></u>
(dollars in millions, except per share amounts)			
Tax benefit	\$92.2	\$ 2.3	\$ 7.0
Per share benefit	\$1.23	\$0.03	\$0.09

<sup>(A)</sup> Litigation charges, net, reduced the tax benefit recognized from the incentive tax grant in Puerto Rico.

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

A tax benefit from an uncertain tax position may be recognized only if it is more likely than not that the position is sustainable based on its technical merits. The tax benefit of a qualifying position is the largest amount of tax benefit that is greater than 50% likely of being realized upon settlement with a taxing authority having full knowledge of all relevant information. A reconciliation of the gross amounts of unrecognized tax benefits, excluding interest and penalties, is as follows:

	<u>2016</u>	<u>2015</u>
(dollars in millions)		
Balance, January 1	\$22.3	\$ 36.1
Additions related to prior year tax positions	0.7	2.9
Reductions related to prior year tax positions	(2.7)	(4.8)
Additions for tax positions of the current year	3.4	2.1
Settlements	(1.1)	(12.4)
Lapse of statutes of limitation	(1.1)	(1.6)
Balance, December 31	<u>\$21.5</u>	<u>\$ 22.3</u>

The company operates in multiple taxing jurisdictions and faces audits from various tax authorities regarding transfer pricing, the deductibility of certain expenses, intercompany transactions and other matters. As of December 31, 2016, the liability for unrecognized tax benefits related to federal, state and foreign taxes was \$21.5 million (of which \$18.4 million would impact the effective tax rate if recognized), plus \$2.6 million of accrued interest. As of December 31, 2015, the liability for unrecognized tax benefits was \$22.3 million plus \$2.8 million of accrued interest. Interest and penalties associated with uncertain tax positions amounted to expense of \$0.3 million in both 2016 and 2015, and a credit of \$0.2 million in 2014.

The company is currently under examination in several tax jurisdictions and remains subject to examination until the statutes of limitation expire. Within specific countries, the company may be subject to audit by various tax authorities, and subsidiaries operating within the country may be subject to different statutes of limitation expiration dates. As of December 31, 2016, a summary of the tax years that remain subject to examination in the company's major tax jurisdictions are:

United States – federal	2014 and forward
United States – states	2008 and forward
China	2008 and forward
Germany	2010 and forward
Japan	2012 and forward
Malaysia	2010 and forward
Puerto Rico	2012 and forward
United Kingdom	2015 and forward

In 2016 and 2014, the company's income tax provision was reduced by \$2.6 million and \$10.9 million, respectively, as a result of the completion of certain U.S. Internal Revenue Service ("IRS") examinations. Depending upon open tax examinations and/or the expiration of applicable statutes of limitation, the company believes that it is reasonably possible that the total amount of unrecognized tax benefits may decrease by up to \$5.1 million within the next 12 months.

At December 31, 2016, the company did not provide for income taxes on the undistributed earnings of certain foreign operations of approximately \$2.5 billion as it is the company's intention to permanently reinvest these undistributed earnings outside of the United States. Determination of the amount of unrecognized deferred tax liability related to these permanently reinvested earnings is not practicable.

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**5. Earnings per Common Share**

Earnings per share (“EPS”) is computed under the two-class method, which requires nonvested share-based payment awards that have non-forfeitable rights to dividend or dividend equivalents to be treated as a separate class of securities in calculating EPS. Participating securities include nonvested restricted stock and units, nonvested shares or units under the management stock purchase program, and certain other nonvested stock-based awards. EPS is computed using the following common share information for the following years ended December 31:

(dollars and shares in millions)	<u>2016</u>	<u>2015</u>	<u>2014</u>
<b>EPS Numerator:</b>			
Net income attributable to common shareholders	\$531.4	\$135.4	\$294.5
Less: Income allocated to participating securities	<u>2.6</u>	<u>1.9</u>	<u>4.8</u>
Net income available to common shareholders	<u>\$528.8</u>	<u>\$133.5</u>	<u>\$289.7</u>
<b>EPS Denominator:</b>			
Weighted average common shares outstanding	74.0	74.1	75.6
Dilutive common share equivalents from share-based compensation plans	<u>1.2</u>	<u>1.3</u>	<u>1.5</u>
Weighted average common and common equivalent shares outstanding, assuming dilution	<u><u>75.2</u></u>	<u><u>75.4</u></u>	<u><u>77.1</u></u>

**6. Financial Instruments***Foreign Exchange Derivative Instruments*

The company enters into readily marketable forward and option contracts with financial institutions to help reduce its exposure to foreign currency exchange rate fluctuations. These contracts limit volatility because gains and losses associated with foreign currency exchange rate movements are generally offset by movements in the underlying hedged item. The notional value of the company’s forward currency and option currency contracts was \$243.2 million and \$191.6 million at December 31, 2016 and 2015, respectively.

*Interest Rate Derivative Instruments*

In January 2016, the company’s outstanding interest rate swap contract was settled concurrent with the maturity of the underlying 2.875% fixed-rate notes. The notional value of the company’s interest rate swap was \$250 million and effectively converted these fixed-rate notes to a floating-rate instrument.

In May 2016, the company’s forward starting interest rate swap contract with a notional value of \$250 million was settled concurrent with the issuance of the 3.000% Notes due 2026. The fair value of the forward starting interest rate swap contract at settlement recorded in accumulated other comprehensive loss was a loss of \$23.3 million. This loss will be recognized as interest expense over the term of the 3.000% Notes due 2026.

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The location and fair value of derivative instruments that are designated as hedging instruments recognized in the consolidated balance sheets at December 31, are as follows:

<u>Derivatives Designated as Hedging Instruments</u> (dollars in millions)	<u>Balance Sheet Location</u>	<u>Fair Value of Derivatives</u>	
		<u>2016</u>	<u>2015</u>
Forward currency contracts	Other current assets	\$ 10.9	\$ 2.9
Option currency contracts	Other current assets	—	3.8
Interest rate swap contract	Other current assets	—	0.2
Forward currency contracts	Other assets	3.9	—
		<u>\$ 14.8</u>	<u>\$ 6.9</u>
Forward currency contracts	Accrued expenses	\$ 6.2	\$ 6.2
Interest rate swap contract	Accrued expenses	—	8.0
		<u>\$ 6.2</u>	<u>\$ 14.2</u>

The location and amounts of gains and losses on derivative instruments designated as cash flow hedges and the impact on shareholders' investment for the years ended December 31, are as follows:

(dollars in millions)	<u>Gain/(Loss) Recognized in Other Comprehensive Income (Loss)</u>			<u>Location of Gain/(Loss) Reclassified from Accumulated Other Comprehensive Loss into Income</u>	<u>Gain/(Loss) Reclassified from Accumulated Other Comprehensive Loss into Income</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>		<u>2016</u>	<u>2015</u>	<u>2014</u>
	Forward currency contracts	\$ 2.3	\$ (5.1)		\$ (4.6)	Cost of goods sold	\$ (7.7)
Option currency contracts	(3.4)	10.1	6.8	Cost of goods sold	(0.6)	13.4	(2.0)
Interest rate swap contract	(15.3)	(8.2)	0.2	Interest expense	(1.5)	—	—
	<u>\$ (16.4)</u>	<u>\$ (3.2)</u>	<u>\$ 2.4</u>		<u>\$ (9.8)</u>	<u>\$ 11.1</u>	<u>\$ (0.6)</u>

At December 31, 2016, the company had losses of approximately \$0.2 million in accumulated other comprehensive loss in the consolidated balance sheet that are expected to be reclassified into earnings in 2017.

*Financial Instruments Measured at Fair Value on a Recurring Basis*

Fair value is defined as the exit price that would be received to sell an asset or paid to transfer a liability. Fair value is a market-based measurement that is determined using assumptions that market participants would use in pricing an asset or liability. The fair value guidance establishes a three-level hierarchy which maximizes the use of observable inputs and minimizes the use of unobservable inputs used in measuring fair value. The levels within the hierarchy range from Level 1 having observable inputs to Level 3 having unobservable inputs.

The following table summarizes certain financial instrument assets/(liabilities) measured at fair value on a recurring basis at December 31:

(dollars in millions)	<u>2016</u>	<u>2015</u>
Forward currency contracts	\$ 8.6	\$ (3.3)
Option currency contracts	—	3.8
Interest rate swap contracts	—	(7.8)

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The fair values were measured using significant other observable inputs and valued by reference to similar financial instruments, adjusted for restrictions and other terms specific to each instrument. These financial instruments are categorized as Level 2 under the fair value hierarchy.

The fair value of the liability for contingent consideration related to acquisitions was measured using significant unobservable inputs and is categorized as Level 3 under the fair value hierarchy. The change in the liability for contingent consideration is as follows:

	<u>2016</u>	<u>2015</u>
(dollars in millions)		
Balance, January 1	\$ 11.2	\$23.1
Purchase price contingent consideration	17.1	5.7
Payments	(2.3)	(8.0)
Change in fair value of contingent consideration	<u>(11.1)</u>	<u>(9.6)</u>
Balance, December 31	<u>\$ 14.9</u>	<u>\$11.2</u>

*Financial Instruments Not Measured at Fair Value*

The estimated fair value of long-term debt (including current maturities and the effect of the related swap contract) was \$1,688.0 million and \$1,449.8 million at December 31, 2016 and 2015, respectively. The fair value was estimated using dealer quotes for similarly-rated debt instruments over the remaining contractual term of the company's obligation and is categorized as Level 2 under the fair value hierarchy.

The fair value of the deferred future payments related to the Medicon Acquisition of \$52.3 million and \$66.0 million at December 31, 2016 and 2015, respectively, approximated the carrying value. During 2016, the company made a payment related to the Medicon Acquisition of \$18.4 million. The fair value was estimated by discounting the future payments based upon the timing of such payments and is categorized as Level 2 under the fair value hierarchy.

*Concentration Risks*

The company is potentially subject to concentration of credit risk through its cash equivalents and accounts receivable. The company performs periodic evaluations of the relative credit standing of its financial institutions and limits the amount of credit exposure with any one institution. Concentrations of risk with respect to trade accounts receivable are limited due to the large number of customers dispersed across many geographic areas.

Accounts receivable balances include sales to government-supported healthcare systems outside the United States. The company monitors economic conditions and evaluates accounts receivable in certain countries for potential collection risks. Economic conditions and other factors in certain countries, particularly in Spain, Italy, Greece and Portugal, have resulted in, and may continue to result in, an increase in the average length of time that it takes to collect these accounts receivable and may require the company to re-evaluate the collectability of these receivables in future periods. At December 31, 2016, the company's accounts receivable, net of allowances, from the national healthcare systems and private sector customers in these four countries was \$44.6 million, of which \$3.3 million was greater than 365 days past due.

Sales to distributors, which supply the company's products to many end-users, accounted for approximately 36% of the company's net sales in 2016 and the five largest distributors combined accounted for approximately 51% of distributors' sales in 2016. One large distributor accounted for approximately 8% of the company's net sales in 2016 and 9% of the company's net sales in each of 2015 and 2014. This distributor represented gross receivables of approximately \$37.3 million and \$45.4 million as of December 31, 2016 and 2015, respectively.

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**7. Inventories**

Inventories at December 31 consisted of:

(dollars in millions)	2016	2015
Finished goods	\$292.8	\$252.3
Work in process	27.0	23.8
Raw materials	163.2	137.6
	\$483.0	\$413.7

Consigned inventory was \$59.4 million and \$53.2 million at December 31, 2016 and 2015, respectively.

**8. Other Intangible Assets**

Other intangible assets at December 31 consisted of:

(dollars in millions)	2016		2015	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Core and developed technologies	\$1,197.7	\$ (511.3)	\$1,161.6	\$ (417.3)
Customer relationships	171.6	(53.2)	150.1	(70.3)
In-process research and development	121.5	—	115.7	—
Other intangibles	190.8	(107.1)	184.9	(105.6)
	\$1,681.6	\$ (671.6)	\$1,612.3	\$ (593.2)

Amounts capitalized as IPR&D are accounted for as indefinite-lived intangible assets until completion or abandonment of the project. See Note 3 of the notes to consolidated financial statements for further discussion of IPR&D impairment charges.

Amortization expense was \$130.5 million, \$119.5 million and \$108.8 million in 2016, 2015 and 2014, respectively. The estimated amortization expense for the years 2017 through 2021 based on the company's amortizable intangible assets as of December 31, 2016 is as follows: 2017 - \$127.6 million; 2018 - \$123.6 million; 2019 - \$119.2 million; 2020 - \$107.0 million; and 2021 - \$88.5 million.

**9. Debt**

Long-term debt including current maturities at December 31 consisted of:

(dollars in millions)	2016	2015
2.875% notes due 2016	\$ —	\$ 250.2
1.375% notes due 2018	499.1	498.2
4.40% notes due 2021	496.9	496.1
3.000% notes due 2026	495.9	—
6.70% notes due 2026	149.8	149.8
	\$1,641.7	\$1,394.3



**C. R. BARD, INC. AND SUBSIDIARIES**

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As discussed in Note 1 of the notes to consolidated financial statements, the company retrospectively adopted an accounting standard update that requires debt issuance costs to be presented as a direct deduction from the carrying amount of the related debt. The adoption of this update required the reclassification of \$3.7 million from other assets to long-term debt on the 2015 consolidated balance sheet.

In January 2016, the company redeemed, at maturity, its 2.875% notes due 2016, primarily through the issuance of commercial paper. On May 9, 2016, the company issued \$500 million aggregate principal amount of 3.000% senior unsecured notes due 2026. Interest on the notes is payable semi-annually. Net proceeds from this offering were approximately \$495.6 million, after deducting debt offering costs, consisting of underwriting commissions and offering expenses of \$4.3 million and a debt issuance discount of \$0.1 million, which were both recorded to long-term debt. The debt offering costs and debt issuance discount will be amortized over the term of the notes. Net proceeds from the issuance of the notes were used for general corporate purposes, including repayment of outstanding commercial paper.

With the exception of the 6.70% notes due 2026, the notes included in the above table are redeemable in whole or in part at any time, at the company's option at specified redemption prices or, at the holder's option, upon change of control triggering event, as defined in the applicable indenture.

In November 2016, the company amended its \$1.0 billion five-year committed syndicated bank credit facility that was scheduled to expire in November 2020. The amendment extends the commitment termination date until November 2021. The amended credit facility supports the company's commercial paper program and can be used for general corporate purposes. The facility includes pricing based on the company's long-term credit ratings and includes a financial covenant that limits the amount of total debt to total capitalization. At December 31, 2016, the company was in compliance with this covenant. There were no commercial paper borrowings outstanding at December 31, 2016 or 2015.

**10. Commitments and Contingencies**

In the ordinary course of business, the company is subject to various legal proceedings, investigations and claims, including, for example, environmental matters, employment disputes, disputes on agreements and other commercial disputes. In addition, the company operates in an industry susceptible to significant product liability and patent legal claims. The company accounts for estimated losses with respect to legal proceedings and claims when such losses are probable and reasonably estimable. If the estimate of a probable loss is a range and no amount within the range is more likely, the company accrues the minimum amount of the range. Legal costs associated with these matters are expensed as incurred. At any given time, in the ordinary course of business, the company is involved as either a plaintiff or defendant in a number of patent infringement actions. If a third party's patent infringement claim were to be determined against the company, the company might be required to make significant royalty or other payments or might be subject to an injunction or other limitation on its ability to manufacture or distribute one or more products. If a patent owned by or licensed to the company is found to be invalid or unenforceable, the company might be required to reduce the value of certain intangible assets on the company's balance sheet and to record a corresponding charge, which could be significant in amount. Many of the company's legal proceedings and claims could have a material adverse effect on its business, results of operations, financial condition and/or liquidity.

The company requires limited product warranty accruals as the majority of the company's products are intended for single use. Certain of the company's products carry limited warranties that in general do not exceed one year from sale. The company accrues estimated product warranty costs at the time of sale.

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*Product Liability Matters*

Hernia Product Claims

As of December 31, 2016, approximately 25 federal and 65 state lawsuits involving individual claims by approximately 90 plaintiffs, as well as one putative class action in the United States, are currently pending against the company with respect to its Composix® Kugel® and certain other hernia repair implant products (collectively, the “Hernia Product Claims”). The company voluntarily recalled certain sizes and lots of the Composix® Kugel® products beginning in December 2005. In June 2007, the Composix® Kugel® lawsuits and, subsequently, other hernia repair product lawsuits, pending in federal courts nationwide were transferred into one Multidistrict Litigation (“MDL”) for coordinated pre-trial proceedings in the United States District Court for the District of Rhode Island. The MDL stopped accepting new cases in the second quarter of 2014 and was terminated in November 2016, at which time the remaining federal lawsuits were remanded to their courts of original jurisdiction for trial. As of December 31, 2016, all but one of the putative class actions pending against the company was dismissed. The remaining putative class action pending against the company has not been certified and seeks: (i) medical monitoring; (ii) compensatory damages; (iii) punitive damages; (iv) a judicial finding of defect and causation; and/or (v) attorneys’ fees. In April 2014, a settlement was reached with respect to the three putative Canadian class actions within amounts previously recorded by the company. Approximately 50 of the state lawsuits, involving individual claims by approximately 50 plaintiffs, are pending in the Superior Court of the State of Rhode Island, with the remainder in various other jurisdictions. The Hernia Product Claims also generally seek damages for personal injury resulting from use of the products.

The company has resolved the majority of its historical Hernia Product Claims, including through agreements or agreements in principle with various plaintiffs’ law firms to settle their respective inventories of cases. Each agreement involving the settlement of a firm’s inventory of claims was subject to certain conditions, including requirements for participation in the proposed settlements by a certain minimum number of plaintiffs. In addition, the company continues to engage in discussions with other plaintiffs’ law firms regarding potential resolution of unsettled Hernia Product Claims, and intends to vigorously defend Hernia Product Claims that do not settle, including through litigation. The company expects additional trials of Hernia Product Claims to take place over the next 12 months. The company cannot give any assurances that the resolution of the Hernia Product Claims that have not settled, including asserted and unasserted claims and the putative class action lawsuit, will not have a material adverse effect on the company’s business, results of operations, financial condition and/or liquidity.

Women’s Health Product Claims

As of December 31, 2016, product liability lawsuits involving individual claims by approximately 6,235 plaintiffs are currently pending against the company in various federal and state jurisdictions alleging personal injuries associated with the use of certain of the company’s surgical continence products for women, which includes products manufactured by both the company and two subsidiaries of Medtronic plc (as successor in interest to Covidien plc) (“Medtronic”), each a supplier of the company. Medtronic has an obligation to defend and indemnify the company with respect to any product defect liability for products its subsidiaries had manufactured. As described below, in July 2015 the company reached an agreement with Medtronic regarding certain aspects of Medtronic’s indemnification obligation. In addition, five putative class actions in the United States and five putative class actions in Canada have been filed against the company, and a limited number of other claims have been filed or asserted in various non-U.S. jurisdictions. The foregoing lawsuits, unfiled or unknown claims, putative class actions and other claims, together with claims that have settled or are the subject of agreements or agreements in principle to settle, are referred to collectively as the “Women’s Health Product Claims”. The Women’s Health Product Claims generally seek damages for personal injury resulting from use of the products. The putative class actions, none of which has been certified, seek: (i) medical monitoring; (ii)

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compensatory damages; (iii) punitive damages; (iv) a judicial finding of defect and causation; and/or (v) attorneys' fees. In April 2015, the Ontario Superior Court of Justice dismissed the plaintiffs' motion for class certification in one Canadian putative class action. In March 2016, the company reached an agreement in principle to resolve all Canadian putative class actions, with the exception of a Quebec class action, within amounts previously recorded by the company, which settlement was finalized in September 2016. In January 2017, the court approved the discontinuance of the proposed Quebec class action.

In October 2010, the Women's Health Product Claims involving solely Avaulta® products pending in federal courts nationwide were transferred into an MDL in the United States District Court for the Southern District of West Virginia (the "WV District Court"), the scope of which was later expanded to include lawsuits involving all women's surgical continence products that are manufactured or distributed by the company. The first trial in a state court was completed in California in July 2012 and resulted in a judgment against the company of approximately \$3.6 million. On appeal the decision was affirmed by the appellate court in November 2014. The company filed a petition for review to the California Supreme Court on December 24, 2014, which was denied on February 18, 2015. The judgment in this matter, including interest and costs, was paid on March 20, 2015 within the amounts previously recorded by the company. The first trial in the MDL commenced in July 2013 and resulted in a judgment against the company of approximately \$2 million, which was upheld by the Fourth Circuit on January 14, 2016. The company does not believe that any verdicts entered to date are representative of potential outcomes of all Women's Health Product Claims. On January 16, 2014 and July 31, 2014, the WV District Court ordered that the company prepare 200 and then an additional 300 individual cases, respectively, for trial (the "2014 WHP Pre-Trial Orders") (the timing for which is currently unknown). The 2014 WHP Pre-Trial Orders resulted in significant additional litigation-related defense costs beginning in the second quarter of 2014 and continuing through the second quarter of 2015. In February 2015, the WV District Court appointed a Special Master to assist with settlement resolution. In June 2015, the WV District Court issued an order staying the requirement to prepare a significant portion of the cases covered by the 2014 WHP Pre-Trial Orders. Substantially all of the 500 individual cases that are the subject of the 2014 WHP Pre-Trial Orders have been part of agreements or agreements in principle to settle with various plaintiff law firms. In December 2016, the WV District Court lifted the stay of the 2014 WHP Pre-Trial Orders and remanded five of the unsettled cases to their courts of original jurisdiction for trial. In response to a January 27, 2017 court order, the company is required to prepare an additional approximately 243 individual cases for trial (together with the 2014 WHP Pre-Trial Orders, the "WHP Pre-Trial Orders"). The WHP Pre-Trial Orders may result in material additional cost in future periods in defending Women's Health Product Claims. The WV District Court may also order that the company prepare additional cases for trial, which could result in material additional costs in future periods.

As of December 31, 2016, the company reached agreements or agreements in principle with various plaintiffs' law firms to settle their respective inventories of cases totaling approximately 11,000 Women's Health Product Claims, including approximately: 560 during 2014, 6,285 during 2015 and 4,155 during 2016. The company believes that these Women's Health Product Claims are not the subject of Medtronic's indemnification obligation. These settlement agreements and agreements in principle include unfiled and previously unknown claims held by various plaintiffs' law firms, which have not been included in the approximate number of lawsuits set forth in the first paragraph of this section. Each agreement is subject to certain conditions, including requirements for participation in the proposed settlements by a certain minimum number of plaintiffs. The company continues to engage in discussions with other plaintiffs' law firms regarding potential resolution of unsettled Women's Health Product Claims, which may include additional inventory settlements. Notwithstanding these settlement efforts, the company anticipates additional trials over the next 12 months. In addition, one or more possible consolidated trials may occur in the future.

In July 2015, as part of the agreement noted above, Medtronic agreed to take responsibility for pursuing settlement of certain of the Women's Health Product Claims that relate to products distributed by the company

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under supply agreements with Medtronic and the company has paid Medtronic \$121 million towards these potential settlements. The company also may, in its sole discretion, transfer responsibility for settlement of additional Women's Health Product Claims to Medtronic on similar terms. The agreement does not resolve the dispute between the company and Medtronic with respect to Women's Health Product Claims that do not settle, if any. As part of the agreement, Medtronic and the company agreed to dismiss without prejudice their previously filed litigation with respect to Medtronic's obligation to defend and indemnify the company.

The approximate number of lawsuits set forth in the first paragraph of this section does not include approximately 600 generic complaints involving women's health products where the company cannot, based on the allegations in the complaints, determine whether any of those cases involve the company's women's health products. In addition, the approximate number of lawsuits set forth in the first paragraph of this section does not include approximately 830 claims that have been threatened against the company but for which complaints have not yet been filed. In addition, the company has limited information regarding the nature and quantity of these and other unfiled or unknown claims. During the course of engaging in settlement discussions with plaintiffs' law firms, the company has learned, and may in future periods learn, additional information regarding these and other unfiled or unknown claims, or other lawsuits, which could materially impact the company's estimate of the number of claims or lawsuits against the company. While the company continues to engage in discussions with other plaintiffs' law firms regarding potential resolution of unsettled Women's Health Product Claims and intends to vigorously defend the Women's Health Product Claims that do not settle, including through litigation, it cannot give any assurances that the resolution of these claims will not have a material adverse effect on the company's business, results of operations, financial condition and/or liquidity.

Filter Product Claims

As of December 31, 2016, product liability lawsuits involving individual claims by approximately 1,425 plaintiffs are currently pending against the company in various federal and state jurisdictions alleging personal injuries associated with the use of the company's vena cava filter products (all lawsuits, collectively, the "Filter Product Claims"). In August 2015, the Judicial Panel for Multi-District Litigation ("JPML") ordered the creation of a Multi-District Litigation for all federal Filter Product Claims (the "IVC Filter MDL") in the District of Arizona. There are approximately 1,375 Filter Product Claims that have been, or shortly will be, transferred to the IVC Filter MDL, including one medical monitoring class action. The remaining approximately 50 Filter Product Claims are pending in various state courts. In March 2016, a putative Canadian class action was filed against the company in Quebec. In April 2016 and May 2016, putative Canadian class actions were filed in Ontario and British Columbia, respectively. In November 2016, a putative Canadian class action was filed in Saskatchewan. The approximate number of lawsuits set forth above does not include approximately 25 claims that have been threatened against the company but for which complaints have not yet been filed. In addition, the company has limited information regarding the nature and quantity of these and other unfiled or unknown claims. The company continues to receive claims and lawsuits and may in future periods learn additional information regarding other unfiled or unknown claims, or other lawsuits, which could materially impact the company's estimate of the number of claims or lawsuits against the company. The company expects that trials of Filter Product Claims may take place over the next 12 months. While the company intends to vigorously defend Filter Product Claims that do not settle, including through litigation, it cannot give any assurances that the resolution of these claims will not have a material adverse effect on the company's business, results of operations, financial condition and/or liquidity.

General

In most product liability litigations (like those described above), plaintiffs allege a wide variety of claims, ranging from allegations of serious injury caused by the products to efforts to obtain compensation

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notwithstanding the absence of any injury. In many of these cases, the company has not yet received and reviewed complete information regarding the plaintiffs and their medical conditions and, consequently, is unable to fully evaluate the claims. The company expects that it will receive and review additional information regarding any remaining unsettled product liability matters.

The company believes that some settlements and judgments, as well as some legal defense costs, relating to product liability matters are or may be covered in whole or in part under its product liability insurance policies with a limited number of insurance carriers, or, in some circumstances, indemnification obligations to the company from other parties, which if disputed, the company intends to vigorously contest. Amounts recovered under the company's product liability insurance policies or indemnification arrangements may be less than the stated coverage limits or less than otherwise expected and may not be adequate to cover damages and/or costs relating to claims. In addition, there is no guarantee that insurers or other parties will pay claims or that coverage or indemnity will be otherwise available.

In January 2017, the company reached an agreement to resolve litigation filed in the Southern District of New York by its insurance carriers in connection with Women's Health Product Claims and Filter Product Claims. The agreement requires the insurance carriers to reimburse the company for certain future costs incurred in connection with Filter Product Claims up to an agreed amount. For certain product liability claims or lawsuits, the company does not maintain or has limited remaining insurance coverage.

*Other Legal Matters*

Since early 2013, the company has received subpoenas or Civil Investigative Demands from a number of State Attorneys General seeking information related to the sales and marketing of certain of the company's products that are the subject of the Hemia Product Claims and the Women's Health Product Claims. The company is cooperating with these requests. Although the company has had discussions with the State Attorneys General with respect to overall potential resolution of this matter, there can be no assurance that a resolution will be reached or what the terms of any such resolution may be. Since it is not feasible to predict the outcome of these proceedings, the company cannot give any assurances that the resolution of these proceedings will not have a material adverse effect on the company's business, results of operations, financial condition and/or liquidity.

In November 2015, the Department of Defense Inspector General issued an investigative subpoena to the company. The Department of Health and Human Services is also participating in this investigation. The subpoena seeks documents related to the company's sales and marketing of certain filter products, drug coated balloon catheters, and peripheral arterial disease detection products. The company is cooperating with these requests. Since it is not feasible to predict the outcome of these proceedings, the company cannot give any assurances that the resolution of these proceedings will not have a material adverse effect on the company's business, results of operations, financial condition and/or liquidity.

In June 2011, W. L. Gore & Associates, Inc. ("Gore") filed suit in the U.S. District Court in Delaware alleging the company had infringed several of Gore's patents. Fact and expert discovery have been completed. In December 2015, the Delaware District Court granted the company's summary judgment motion of no willful infringement. However, that decision was vacated in June 2016 due to a United States Supreme Court ruling that changed the test for willful infringement historically applied by the lower courts. In July 2016, the company's summary judgment motion of laches (undue delay) was denied, at least in part because of the currently pending Supreme Court case on this issue, which was heard during the Fall 2016 term. Previously, the company filed a motion to dismiss a significant portion of Gore's damages claim on the grounds that Gore lacks proper standing. This motion was converted to a motion for summary judgment and was granted in July 2016, effectively

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reducing the amount of potential damages. The trial has been set for March 2017. The company intends to vigorously defend the allegations asserted by Gore. The company cannot give any assurances that an adverse resolution of this matter will not have a material adverse effect on the company's business, results of operations, financial condition and/or liquidity.

The company is subject to numerous federal, state, local and foreign environmental protection laws governing, among other things, the generation, storage, use and transportation of hazardous materials and emissions or discharges into the ground, air or water. The company is or may become a party to proceedings brought under various federal laws including the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly known as Superfund, the Resource Conservation and Recovery Act, the Clean Water Act, the Clean Air Act and similar state or foreign laws. These proceedings seek to require the owners or operators of contaminated sites, transporters of hazardous materials to the sites and generators of hazardous materials disposed of at the sites to clean up the sites or to reimburse the government for cleanup costs. In most cases, there are other potentially responsible parties that may be liable for remediation costs. In these cases, the government alleges that the defendants are jointly and severally liable for the cleanup costs; however, these proceedings are frequently resolved so that the allocation of cleanup costs among the parties more closely reflects the relative contributions of the parties to the site contamination. The company's potential liability varies greatly from site to site. For some sites, the potential liability is de minimis and for others the costs of cleanup have not yet been determined. Accruals for estimated losses from environmental remediation obligations generally are recognized no later than completion of the remedial feasibility study and are adjusted as further information develops or circumstances change. Costs of future expenditures for environmental remediation obligations are not discounted to their present value. Recoveries of environmental remediation costs from other parties are recorded as assets when their receipt is deemed probable. The company believes that the proceedings and claims described above will likely be resolved over an extended period of time. While it is not feasible to predict the outcome of these proceedings, based upon the company's experience, current information and applicable law, the company does not expect these proceedings to have a material adverse effect on its financial condition and/or liquidity. However, one or more of the proceedings could be material to the company's business and/or results of operations.

*Litigation Reserves*

The company regularly monitors and evaluates the status of product liability and other legal matters, and may, from time-to-time, engage in settlement and mediation discussions taking into consideration developments in the matters and the risks and uncertainties surrounding litigation. These discussions could result in settlements of one or more of these claims at any time.

In the second quarter of 2014, the company recorded a charge, net of estimated recoveries to other (income) expense, net, of approximately \$259 million (\$238 million after tax) related to certain of the product liability matters discussed above under the heading "Product Liability Matters". The company recorded this charge based on additional information obtained during the quarter, including but not limited to: the allegations and documentation supporting or refuting such allegations; publicly available information regarding similar medical device mass tort settlements; historical information regarding other product liability settlements involving the company; and the procedural posture and stage of litigation. Specifically, the company considered its discussions with plaintiffs' counsel, the increase in the rate of claims being filed (which led the company to increase its estimate of future Women's Health Product Claims), and the value, number of cases and nature of the inventory of cases with respect to the recent settlements of claims by the company and other manufacturers.

In the second quarter of 2015, the company recorded an additional charge related to these matters, net of estimated recoveries to other (income) expense, net, of approximately \$337 million (\$325 million after tax). The

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company recorded this charge based on additional information obtained during the quarter, including with respect to the factors noted above. Specifically the company considered the agreement and the agreement in principle by the company to settle approximately 2,880 Women's Health Product Claims, the involvement of the Special Master in settlement resolution, additional settlements by other manufacturers subject to product liability claims with respect to similar products, and the continued rate of claims being filed (which led the company to increase its estimate of future Women's Health Product Claims).

In the third quarter of 2015, the company recorded an additional charge related to these matters to other (income) expense, net, of approximately \$241 million (\$228 million after tax). The company recorded this charge based on additional information obtained with respect to the quarter, including with respect to the factors noted above. Specifically, the company considered the agreements and the agreement in principle by the company to settle approximately 3,030 Women's Health Product Claims, discussions with plaintiffs' counsel, additional information learned regarding the nature and quantity of unfiled and unknown claims (which led the company to increase its estimate of future Women's Health Product Claims), a reconciliation of claims in connection with settlements, additional settlements by other manufacturers subject to product liability claims with respect to similar products, the rate of claims being filed, and the creation of the IVC Filter MDL.

In the first quarter of 2016, the company recorded an additional charge related to these matters to other (income) expense, net, of approximately \$49 million (\$31 million after tax). The company recorded this charge based on additional information obtained with respect to the quarter. Specifically, the company considered, among other factors, additional information learned regarding the nature and quantity of unfiled and filed claims, the increase in advertising by plaintiffs' counsel with respect to IVC filters and an increase in the rate of claims being filed in Filter Product Claims (which led the company to increase its estimate of future Filter Product Claims).

In the third quarter of 2016, the company recorded an additional charge related to these matters to other (income) expense, net, of approximately \$111 million (\$77 million after tax). The company recorded this charge based on additional information obtained with respect to the quarter, including with respect to the factors noted above. Specifically, the company considered, among other factors, additional information learned regarding Product Liability Matters, including regarding the nature and quantity of unfiled and filed claims and the continued rate of claims being filed in certain Product Liability Matters (which led the company to increase its estimate of future claims for certain Product Liability Matters, including Filter Product Claims).

In the fourth quarter of 2016, the company recorded an additional charge related to these matters to other (income) expense, net, of approximately \$46 million (\$31 million after tax). The company recorded this charge based on additional information obtained with respect to the quarter, including regarding cases settled by certain other manufacturers, public information available from the court, unfiled and filed claims, the status of certain settlement discussions and information regarding plaintiff law firm inventories.

These charges recognized the estimated costs for the product liability matters discussed above, including (with respect to such matters) filed and an estimate of unfiled and unknown claims, and costs to administer the settlements related to such matters. These charges exclude any costs associated with certain of the putative class action lawsuits in the United States and Canada.

The company cannot give any assurances that the actual costs incurred with respect to these product liability matters will not exceed the related amounts accrued. With respect to product liability claims that are not resolved through settlement, the company intends to vigorously defend against such claims, including through litigation. The company cannot give any assurances that the resolution of any of its product liability matters, including

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

filed, unfiled and unknown claims and the putative class action lawsuits, will not have a material adverse effect on the company's business, results of operations, financial condition and/or liquidity.

Accruals for product liability and other legal matters amounted to \$1,201.5 million, of which \$605.3 million was recorded to accrued expenses, and \$1,174.3 million, of which \$516.5 million was recorded to accrued expenses, at December 31, 2016 and December 31, 2015, respectively. The company has made total payments of \$762.4 million to qualified settlement funds ("QSFs"), subject to certain settlement conditions, for certain product liability matters since 2011, of which \$375.2 million were made to QSFs during 2016. Payments to QSFs are recorded as a component of restricted cash. Total payments of \$562.7 million from these QSFs have been made to qualified claimants, of which \$254.0 million were made during 2016. In addition, other payments of \$73.3 million have been made to qualified claimants, of which \$10.8 million were made during 2016.

The company recorded expected recoveries related to product liability matters amounting to \$267.3 million, of which \$156.2 million was recorded to other current assets, and \$132.8 million, of which \$132.1 million was recorded to other assets, at December 31, 2016 and December 31, 2015, respectively. A substantial amount of these expected recoveries at December 31, 2016 relate to the company's agreements with Medtronic related to certain Women's Health Product Claims. The terms of the company's agreement with Medtronic are substantially consistent with the assumptions underlying, and the manner in which, the company has recorded expected recoveries related to the indemnification obligation. The expected recoveries at December 31, 2016 and 2015 related to the indemnification obligation are not in dispute with respect to claims that Medtronic settles pursuant to the agreement. As described above, the agreement does not resolve the dispute between the company and Medtronic with respect to Women's Health Product Claims that do not settle, if any, and the company also may, in its sole discretion, transfer responsibility for settlement of additional Women's Health Product Claims to Medtronic on similar terms.

The company is unable to estimate the reasonably possible losses or range of losses, if any, arising from certain existing product liability matters and other legal matters. Under U.S. generally accepted accounting principles, an event is "reasonably possible" if "the chance of the future event or events occurring is more than remote but less than likely" and an event is "remote" if "the chance of the future event or events occurring is slight". With respect to putative class action lawsuits in the United States and certain of the Canadian lawsuits relating to product liability matters, the company is unable to estimate a range of reasonably possible losses for the following reasons: (i) all or certain of the proceedings are in early stages; (ii) the company has not received and reviewed complete information regarding all or certain of the plaintiffs and their medical conditions; and/or (iii) there are significant factual issues to be resolved. In addition, there is uncertainty as to the likelihood of a class being certified or the ultimate size of the class. In addition, with respect to the investigative subpoenas issued by various state and federal government agencies and other legal matters, the company is unable to estimate a range of reasonably possible losses for the following reasons: (i) all or certain of the proceedings are in early stages; and/or (ii) there are significant factual and legal issues to be resolved. With respect to Gore's suit against the company alleging infringement of certain of Gore's patents, the company is unable to estimate a range of reasonably possible losses for the following reasons: (i) the stage of the proceedings; and/or (ii) there are significant factual and legal issues to be resolved.

The company is committed under noncancelable operating leases involving certain facilities and equipment. The minimum annual rentals under the terms of these leases are as follows: 2017 - \$35.0 million; 2018 - \$29.8 million; 2019 - \$21.6 million; 2020 - \$15.3 million; 2021 - \$10.3 million and thereafter - \$37.0 million. Total rental expense for operating leases approximated \$34.8 million in 2016, \$31.7 million in 2015 and \$32.3 million in 2014.



**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**11. Share-Based Compensation Plans**

The company may grant a variety of share-based payments under the 2012 Long Term Incentive Plan of C. R. Bard, Inc., as amended and restated (the “LTIP”) and the 2005 Directors’ Stock Award Plan of C. R. Bard, Inc., as amended and restated (the “Directors’ Plan”) to certain directors, officers and employees. The total number of remaining shares at December 31, 2016 that may be issued under the LTIP was 3,639,647 and under the Directors’ Plan was 21,890. Awards under the LTIP may be in the form of stock options, stock appreciation rights, limited stock appreciation rights, restricted stock, unrestricted stock and other stock-based awards. Awards under the Directors’ Plan may be in the form of stock awards, stock options or stock appreciation rights. The company also has two employee stock purchase programs.

Amounts charged against income for share-based payment arrangements were \$90.0 million for 2016, \$81.8 million for 2015 and \$71.4 million for 2014. The related income tax benefit recognized in income for share-based payment arrangements was \$30.2 million for 2016, \$27.7 million for 2015 and \$24.2 million for 2014.

As of December 31, 2016, there were \$144.3 million of unrecognized compensation costs related to share-based payment arrangements. These costs are expected to be recognized over a weighted-average period of approximately two years. The company has sufficient shares to satisfy expected share-based payment arrangements in 2017.

*Stock Options* - The company grants stock options to certain employees and may grant stock options to directors with exercise prices equal to the average of the high and low prices of the company’s common stock on the date of grant. These stock option awards generally have requisite service periods of up to four years, and ten-year contractual terms. Certain stock option awards granted in prior years provided for accelerated vesting after a minimum of two years subject to performance conditions, which were met. Summarized information regarding total stock option activity and amounts for the year ended December 31, 2016 is as follows:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (millions)
Outstanding - January 1	3,918,435	\$124.77		
Granted	249,213	218.15		
Exercised	(795,663)	97.31		
Canceled/forfeited	(76,106)	155.19		
Outstanding - December 31	<u>3,295,879</u>	\$137.76	6.5	\$ 286.5
Exercisable	<u>2,129,474</u>	\$113.99	5.35	\$ 235.7

The company uses a binomial-lattice option valuation model to estimate the fair value of stock options. The assumptions used to estimate the fair value of the company’s stock option grants for the following years ended December 31 are:

	2016	2015	2014
Dividend yield	0.5%	0.5%	0.6%
Risk-free interest rate	1.6%	1.3%	1.2%
Expected option life in years	7.4	6.5	6.5
Expected volatility	21%	21%	21%
Option fair value	\$54.71	\$40.94	\$35.69

**C. R. BARD, INC. AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Compensation expense related to stock options was \$23.9 million, \$22.6 million and \$19.4 million for the years ended December 31, 2016, 2015 and 2014, respectively. At December 31, 2016, there were \$31.6 million of total unrecognized compensation costs related to nonvested stock options. These costs are expected to be recognized over a weighted-average period of approximately two years. During the years ended December 31, 2016, 2015 and 2014, 650,782, 730,082 and 709,882 options, respectively, vested with a weighted-average fair value of \$31.45, \$26.11 and \$23.07, respectively. The total intrinsic value of stock options exercised during 2016, 2015 and 2014 was \$91.7 million, \$94.6 million and \$95.7 million, respectively.

Cash received from stock option exercises for the years ended December 31, 2016, 2015 and 2014 was \$75.0 million, \$89.4 million and \$120.9 million, respectively. The actual tax benefit realized for the tax deductions from option exercises was \$30.3 million, \$32.1 million and \$32.2 million for the years ended December 31, 2016, 2015 and 2014, respectively.

*Restricted Stock and Units*—Restricted stock awards entitle employees to voting and dividend rights. Restricted stock units entitle employees to dividend rights. Certain restricted stock awards have performance features. Restricted stock and unit grants have requisite service periods of between four to five years. Compensation expense related to restricted stock and units was \$23.1 million, \$23.8 million and \$21.7 million for the years ended December 31, 2016, 2015 and 2014, respectively. At December 31, 2016, there were \$52.9 million of total unrecognized compensation costs related to nonvested restricted stock and unit awards. These costs are expected to be recognized over a weighted-average period of approximately two years. The activity in the nonvested restricted stock and unit awards for the year ended December 31, 2016 is as follows:

	<u>Number of Shares</u>	<u>Weighted Average Grant Date Fair Value</u>
Outstanding - January 1	471,920	\$ 147.41
Granted	178,825	219.63
Vested	(165,115)	129.87
Forfeited	(12,542)	153.13
Outstanding - December 31	<u>473,088</u>	<u>\$ 180.67</u>

*Other Restricted Stock Units*—Certain other restricted stock units have requisite service periods of between four and seven years. No voting or dividend rights are associated with these grants until the underlying shares are issued upon vesting. Compensation expense related to these awards was \$9.1 million, \$7.3 million and \$7.1 million for the years ended December 31, 2016, 2015 and 2014, respectively. At December 31, 2016, there were \$31.7 million of total unrecognized compensation costs related to these nonvested restricted stock unit awards. These costs are expected to be recognized over a weighted-average period of approximately four years. The activity in the nonvested restricted stock unit awards for the year ended December 31, 2016 is as follows:

	<u>Number of Shares</u>	<u>Weighted Average Grant Date Fair Value</u>
Outstanding - January 1	406,533	\$ 115.30
Granted	99,240	200.12
Vested	(79,750)	96.65
Forfeited	(23,933)	139.71
Outstanding - December 31	<u>402,090</u>	<u>\$ 138.47</u>

**C. R. BARD, INC. AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

*Performance Restricted Stock Units*—In the first quarter of each of 2016, 2015 and 2014, the company granted performance restricted stock units to officers. These units have requisite service periods of three years and have no dividend rights. Compensation expense related to performance restricted stock units was \$18.8 million, \$14.9 million and \$12.7 million for the years ended December 31, 2016, 2015 and 2014, respectively. At December 31, 2016, there were \$19.4 million of total unrecognized compensation costs related to nonvested performance restricted stock units. These costs are expected to be recognized over a weighted-average period of approximately two years. The actual payout of these units varies based on the company's performance over the three-year period based on pre-established targets over the period and a market condition modifier based on total shareholder return ("TSR") compared to an industry peer group. The actual payout under these awards may exceed an officer's target payout; however, compensation cost initially recognized assumes that the target payout level will be achieved and may be adjusted for subsequent changes in the expected outcome of the performance-related condition. The fair values of these units are based on the market price of the company's stock on the date of the grant and use a Monte Carlo simulation model for the TSR component. The fair values of the TSR components of the 2016, 2015 and 2014 grants were estimated based on the following assumptions: risk-free interest rate of 0.83%, 0.86% and 0.70%, respectively; dividend yield of 0.52%, 0.51% and 0.62%, respectively; and expected life of approximately 2.9 years for the 2016 and 2014 grants and 2.8 years for the 2015 grant. At December 31, 2016 and 2015, there were 313,412 and 304,751 nonvested performance restricted stock units outstanding, respectively.

*Other Stock-Based Awards*—The company grants stock awards to directors. Shares have been generally distributed to directors annually and have a requisite service period of three years. The fair value of these awards is charged to compensation expense over the directors' terms. Restrictions limit the sale or transfer of these awards until the awarded stock vests. There are voting and dividend rights associated with these awards. Compensation expense related to these stock awards was \$0.8 million for both of the years ended December 31, 2016 and 2015, and \$0.9 million for the year ended December 31, 2014. At December 31, 2016, there were \$0.4 million of total unrecognized compensation costs related to nonvested other stock-based awards. These costs are expected to be recognized over a weighted-average period of approximately two years. At December 31, 2016 and 2015, nonvested other stock-based awards of 13,076 and 13,741 shares, respectively, were outstanding.

*Management Stock Purchase Program*—The company maintains a management stock purchase program under the Plan (together with a predecessor stock purchase plan, the "MSPP"). Under the MSPP, employees at a specified level may purchase, with their eligible annual bonus, common stock units at a 30% discount from the lower of the price of the common stock on July 1 of the previous year or on the date of purchase, which occurs on the date bonuses are approved by the Board of Directors. Employees make an election on or before June 30 of the previous year as to the percentage of their eligible annual bonus that will be used to purchase common stock units under the MSPP. The company's predecessor plan provided for the purchase of shares of the company's common stock. Employees are required to allocate at least 25% of their eligible annual bonuses to purchase common stock units under the MSPP to the extent they have not satisfied certain stock ownership guidelines. MSPP shares or units are restricted from sale or transfer for four years from the purchase date. Only shares or units corresponding to the 30% discount are forfeited if the employee's employment terminates prior to the end of the four-year vesting period. Dividends or dividend-equivalents are paid on MSPP shares or units, and the

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

participant has the right to vote all MSPP shares. The activity in the MSPP for the year ended December 31, 2016 is as follows:

	Number of Shares	Weighted Average Grant Date Fair Value
Outstanding - January 1	197,997	\$ 39.70
Purchased	54,359	60.54
Vested	(44,562)	32.44
Forfeited	(7,790)	47.96
Outstanding - December 31	<u>200,004</u>	<u>\$ 46.66</u>

The company uses the Black-Scholes model, as a result of the option-like features of the MSPP, to estimate the expense associated with anticipated MSPP purchases. Compensation expense is recognized over a period that will end four years after purchase. The assumptions used for the following years ended December 31 are:

	2016	2015	2014
Dividend yield	0.5%	0.6%	0.6%
Risk-free interest rate	0.39%	0.16%	0.07%
Expected life in years	0.6	0.6	0.6
Expected volatility	18%	17%	20%
Fair value	\$83.23	\$60.47	\$51.82

Compensation expense related to this program was \$10.7 million, \$9.2 million and \$6.7 million for the years ended December 31, 2016, 2015 and 2014, respectively. At December 31, 2016, there were \$8.3 million of total unrecognized compensation costs related to nonvested MSPP shares and units. These costs are expected to be recognized over a weighted-average period of approximately two years.

*Employee Stock Purchase Plan*—Under the Employee Stock Purchase Plan of C. R. Bard, Inc. as Amended and Restated (“ESPP”), domestic employees and certain foreign employees can purchase Bard stock at a 15% discount to the lesser of the market price on the beginning or ending date of the six-month periods ending June 30 and December 31 of each year. Participants in the ESPP may elect to make after-tax payroll deductions of 1% to 10% of compensation as defined by the plan up to the stated maximum of \$20,000 per year. The ESPP is intended to meet the requirements of Section 423 of the Internal Revenue Code of 1986, as amended. At December 31, 2016, 185,383 shares were available for purchase under the ESPP. Employee payroll deductions are for six-month periods beginning each January 1 and July 1. Shares of the company’s common stock are purchased on June 30 or December 31 or the following business day, unless either the purchase of such shares was delayed at the election of the participant or the participant’s employment was terminated. Purchased shares are restricted for sale or transfer for a six-month period. All participant funds received prior to the ESPP purchase dates are held as company liabilities without interest or other increment. No dividends are paid on employee contributions until shares are purchased.

The company values the ESPP purchases utilizing the Black-Scholes model. The weighted average assumptions used for the following years ended December 31 are:

	2016	2015	2014
Dividend yield	0.5%	0.6%	0.6%
Risk-free interest rate	0.45%	0.14%	0.08%
Expected life in years	0.5	0.5	0.5
Expected volatility	21%	17%	18%
Fair value	\$42.71	\$33.45	\$27.73

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Compensation expense related to this plan was \$3.6 million, \$3.2 million and \$2.9 million for the years ended December 31, 2016, 2015 and 2014, respectively. For the years ended December 31, 2016 and 2015, employees purchased 94,841 and 107,359 shares, respectively.

**12. Pension and Other Postretirement Benefit Plans**

**Defined Benefit Pension Plans**

The company has both tax-qualified and nonqualified, noncontributory defined benefit pension plans that together cover certain domestic and foreign employees. These plans provide benefits based upon a participant's compensation and years of service. The nonqualified plans are made up of the following arrangements: a nonqualified supplemental deferred compensation arrangement and a nonqualified excess pension deferred compensation arrangement (together, "the nonqualified plans"). The nonqualified supplemental deferred compensation arrangement provides supplemental income to key executives of the company. The benefit is determined by the accumulation of an account balance that results from a percentage of pay credit and interest. No deferrals of pay are required from participants. The balance is paid to a participant after retirement over a 15-year period. The nonqualified excess pension deferred compensation arrangement provides benefits to key employees that cannot be provided by the qualified plan due to IRS limitations.

The change in benefit obligation, change in fair value of plan assets and funded status for the plans are as follows:

	<u>2016</u>	<u>2015</u>
(dollars in millions)		
Benefit obligation - beginning	\$ 586.9	\$ 544.0
Service cost	29.2	30.1
Interest cost	19.0	20.2
Transfers—Medicon	(19.1)	25.4
Curtailment	(5.9)	—
Actuarial loss (gain)	24.3	6.1
Benefits paid	(31.8)	(33.1)
Currency/other	(13.3)	(5.8)
Benefit obligation - ending	<u>\$ 589.3</u>	<u>\$ 586.9</u>
Fair value of plan assets - beginning	\$ 462.6	\$ 455.6
Actual return on plan assets	35.6	(5.1)
Company contributions	34.8	31.6
Transfers—Medicon	(19.0)	17.9
Benefits paid	(31.8)	(33.1)
Currency/other	(12.5)	(4.3)
Fair value of plan assets - ending	<u>\$ 469.7</u>	<u>\$ 462.6</u>
Funded status of the plans, December 31	<u>\$(119.6)</u>	<u>\$(124.3)</u>

Foreign benefit plan assets at fair value included in the preceding table were \$86.8 million and \$107.8 million at December 31, 2016 and 2015, respectively. The foreign pension plan benefit obligations included in this table were \$102.4 million and \$123.1 million at December 31, 2016 and 2015, respectively. The benefit obligation for nonqualified plans also included in this table was \$86.4 million and \$78.9 million at December 31, 2016 and 2015, respectively. The nonqualified plans are generally not funded.

**C. R. BARD, INC. AND SUBSIDIARIES****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

At December 31, 2016 and 2015, the accumulated benefit obligation for all pension plans was \$537.6 million and \$526.4 million, respectively. At December 31, 2016 and 2015, the accumulated benefit obligation for foreign pension plans was \$87.6 million and \$105.5 million, respectively. The accumulated benefit obligation for the nonqualified plans was \$82.8 million and \$75.1 million at December 31, 2016 and 2015, respectively.

For pension plans with benefit obligations in excess of plan assets at December 31, 2016 and 2015, the fair value of plan assets was \$469.7 million and \$444.7 million, respectively, and the benefit obligation was \$589.3 million and \$576.3 million, respectively. For pension plans with accumulated benefit obligations in excess of plan assets at December 31, 2016 and 2015, the fair value of plan assets was \$8.0 million and \$7.1 million, respectively, and the accumulated benefit obligation was \$94.6 million and \$96.6 million, respectively.

Defined benefit plans are an exception to the recognition and fair value measurement principles in business combinations. Defined benefit plan obligations are recognized and measured in accordance with the accounting principles for benefit plans rather than at fair value. Accordingly, at the time of acquisition, the company remeasured the benefit plans sponsored by Medicon and recognized an asset or liability for the funded status of these plans. See Note 2 of the notes to consolidated financial statements.

In the fourth quarter of 2016, the Medicon defined benefit pension plans were frozen to further benefit accruals and closed to new participants. This action required a remeasurement of the plans' assets and obligations, which resulted in a non-cash curtailment gain of \$5.3 million. These plans were converted to a defined contribution plan.

Amounts recognized in accumulated other comprehensive loss at December 31 consisted of:

	<u>2016</u>	<u>2015</u>
(dollars in millions)		
Net loss	\$169.2	\$163.7
Prior service credit	<u>(1.9)</u>	<u>(2.7)</u>
Before tax amount	<u>\$167.3</u>	<u>\$161.0</u>
After tax amount	<u>\$108.7</u>	<u>\$103.8</u>

The change in net loss in the above table included net losses of \$16.7 million (\$11.3 million after tax) and \$41.3 million (\$26.5 million after tax) during the years ended December 31, 2016 and 2015, respectively.

Amounts recognized in the consolidated balance sheets at December 31 consisted of:

	<u>2016</u>	<u>2015</u>
(dollars in millions)		
Other assets	\$ —	\$ 7.2
Accrued compensation and benefits	(4.6)	(4.6)
Other long-term liabilities	<u>(115.0)</u>	<u>(126.9)</u>
Net amount recognized	<u>\$(119.6)</u>	<u>\$(124.3)</u>

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The estimated net actuarial loss for pension benefits that will be amortized from accumulated other comprehensive loss into net pension cost over the next fiscal year is expected to be \$12.7 million.

The components of net periodic benefit cost for the following years ended December 31 are:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
(dollars in millions)			
Service cost, net of employee contributions	\$ 28.8	\$ 29.6	\$ 26.9
Interest cost	19.0	20.2	21.2
Expected return on plan assets	(32.1)	(31.3)	(27.9)
Amortization of net loss	10.8	12.4	10.4
Amortization of prior service cost	(0.4)	(0.4)	(0.4)
Curtailment	(5.3)	—	—
Net periodic pension cost	<u>\$ 20.8</u>	<u>\$ 30.5</u>	<u>\$ 30.2</u>

The net pension cost attributable to foreign plans included in the above table were a credit of \$0.5 million in 2016 and cost of \$4.4 million and \$4.2 million in 2015 and 2014, respectively.

The weighted average assumptions used in determining pension plan information for the following years ended December 31 are:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
<b>Net Cost</b>			
Discount rate – service cost	4.26%	3.79%	4.58%
Discount rate – interest cost	3.47%	3.79%	4.58%
Expected return on plan assets	6.72%	7.17%	7.26%
Rate of compensation increase	3.57%	3.42%	3.49%
<b>Benefit Obligation</b>			
Discount rate	3.91%	4.03%	3.79%
Rate of compensation increase	3.58%	3.57%	3.42%

Prior to 2016, the company estimated the service and interest cost components using a single weighted-average discount rate derived from the yield curves used to measure the benefit obligation. In 2016, the company changed its method used to estimate the service and interest cost components of net periodic benefit cost for defined benefit plans. The company has elected to use a full yield curve approach in the estimation of these components of benefit cost by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. The company made this change to improve the correlation between projected benefit cash flows and the corresponding yield curve spot rates and to provide a more precise measurement of service and interest costs. The company has accounted for this change as a change in estimate and began to account for it prospectively in 2016. The reduction in service and interest cost for 2016 associated with this change in estimate was approximately \$4.8 million.

The long-term rate of return for plan assets is derived from return assumptions determined for each of the significant asset classes. Under this approach, the historical real returns (net of inflation) on different asset classes are combined with long-term expectations for inflation to determine an expected return on assets within that class. These real rates of return for each asset class reflect the long-term historical relationships between equities and fixed income investments. Current market factors such as inflation and interest rates are evaluated before long-term assumptions are determined. The long-term portfolio return is established based on the combination of these asset class real returns and inflation with proper consideration of the effects of diversification and rebalancing.

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

*Plan Assets*—The company employs a total return investment approach whereby a mix of equities and fixed income investments are used to balance the need for long-term return of plan assets with a prudent level of risk. The intent of this strategy is to minimize plan expenses by exceeding the interest growth in plan liabilities over the long run. Risk tolerance is established through careful consideration of plan liabilities, plan funded status and corporate financial condition. This consideration involves the use of long-term measures that address both return and risk and are not impacted significantly by short-term fluctuations. Equity investments include a diversified mix of growth, value and small and large capitalization securities. Investment risks and returns are measured and monitored on an ongoing basis through quarterly investment portfolio reviews.

The weighted average target asset allocations for the plans at December 31, are as follows:

Asset Categories	Target Allocation	
	2016	2015
Equity securities	65%	63%
Fixed income securities	33%	35%
Cash equivalents	2%	2%
<b>Total</b>	<b>100%</b>	<b>100%</b>

Due to short-term fluctuations in asset performance, allocation percentages may temporarily deviate from these target allocation percentages before a rebalancing occurs. Cash equivalents are used to satisfy benefit disbursement requirements and will vary throughout the year.

The following table summarizes fair value measurements of plan assets at December 31:

	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		Total <sup>(B)</sup>	
	2016	2015	2016	2015	2016	2015
	(dollars in millions)					
Cash equivalents	\$ 3.4	\$ 7.1	\$ —	\$ —	\$ 3.4	\$ 7.1
Equity securities:						
U.S. large-cap	125.7	117.3	—	—	125.7	117.3
U.S. small-cap	40.6	37.2	—	—	40.6	37.2
Foreign	118.0	117.3	—	—	118.0	117.3
Fixed income securities:						
Diversified bond funds <sup>(A)</sup>	131.6	121.1	—	2.1	131.6	123.2
Foreign government bonds	11.5	17.5	—	3.9	11.5	21.4
Foreign corporate notes and bonds	11.3	12.7	—	—	11.3	12.7
Private alternative investment	—	—	19.6	19.3	19.6	19.3
Guaranteed insurance contracts	—	—	8.0	7.1	8.0	7.1
<b>Total plan assets</b>	<b>\$442.1</b>	<b>\$430.2</b>	<b>\$27.6</b>	<b>\$32.4</b>	<b>\$469.7</b>	<b>\$462.6</b>

<sup>(A)</sup> Diversified bond funds consists of U.S. Treasury bonds, mortgage backed securities, and corporate bonds.

<sup>(B)</sup> There were no plan assets categorized as Level 3 at December 31, 2016 or 2015.



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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

As discussed in Note 1 of the notes to consolidated financial statements, the company adopted a new accounting standard update that clarifies that an equity security has a readily determinable fair value if it meets certain conditions. As a result, certain plan assets previously reported as Level 2 were reclassified to Level 1 in the fair value hierarchy for which fair value is readily determinable. These assets include commingled funds invested in cash equivalents, equities and fixed income securities and are valued at net asset value (“NAV”) as determined by the fund administrators.

Plan assets categorized as Level 2 primarily consist of private alternative investments, guaranteed insurance contracts and fixed income securities. These assets are valued using other inputs, such as NAV provided by the fund administrators or by dealer quotes for similarly-rated instruments that are observable or that can be corroborated by observable market data for substantially the remaining term of the plan instruments. There were no redemption restrictions on these investments other than for the private alternative investment, which requires a 60 day notice period for quarterly redemptions and a 90 day notice period for monthly redemptions, or unfunded commitments related to assets valued at NAV at December 31, 2016.

*Funding Policy and Expected Contributions*—The company’s objective in funding its domestic tax-qualified plan is to accumulate funds sufficient to provide for all benefits and to satisfy the minimum contribution requirements of ERISA. Outside the United States, the company’s objective is to fund the international retirement costs over time within the limits of minimum requirements and allowable tax deductions. The company’s annual funding decisions also consider the relationship between the returns on each asset compared to the plan’s corresponding expense and consider the relationship between each tax-qualified plan’s benefit obligation and its corresponding funded status. The company expects to make discretionary contributions of up to \$30 million to its qualified plans in 2017.

The total expected benefit payments are as follows:

(dollars in millions)	
2017	\$ 33.9
2018	32.4
2019	34.1
2020	36.1
2021	35.5
2022 through 2026	206.6

**Defined Contribution Retirement Plans**

All domestic employees of the company not covered by a collective bargaining agreement who have been scheduled for 1,000 hours of service are eligible to participate in the company’s defined contribution plan. The amounts charged to income for this plan were \$16.0 million, \$15.9 million and \$14.1 million for the years ended December 31, 2016, 2015 and 2014, respectively. Outside the United States, the company maintains defined contribution plans along with small pension arrangements that are typically funded with insurance products. These arrangements had a total expense of \$5.3 million for the year ended December 31, 2016 and \$5.1 million for each of the years ended December 31, 2015 and 2014. In addition, the company maintains a long-term deferred compensation arrangement for directors that allows for the deferral of the annual retainer and meeting fees at the director’s election and provides certain other long-term compensation benefits. The company annually accrues for long-term compensation, which is paid out upon the director’s retirement from the board. These arrangements had a total expense of \$6.9 million, \$5.5 million and \$6.9 million for the years ended December 31, 2016, 2015 and 2014, respectively, and a benefit obligation of \$36.1 million and \$35.4 million at December 31, 2016 and 2015, respectively.

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**Other Postretirement Benefit Plan**

The company does not provide subsidized postretirement healthcare benefits and life insurance coverage except for a limited number of former employees. As this plan is unfunded, contributions are made as benefits are incurred. The benefit obligation for this plan was \$6.2 million and \$7.0 million at December 31, 2016 and 2015, respectively. Amounts recognized in accumulated other comprehensive loss were \$1.5 million (\$0.9 million after tax) for the year ended December 31, 2016 and \$2.0 million (\$1.3 million after tax) for the year ended December 31, 2015. The net periodic benefit cost was \$0.3 million, \$0.4 million and \$0.5 million for the years ended December 31, 2016, 2015 and 2014, respectively.

**13. Other (Income) Expense, Net**

The components of other (income) expense, net, for the following years ended December 31 are:

(dollars in millions)	<u>2016</u>	<u>2015</u>	<u>2014</u>
Interest income	\$ (1.6)	\$ (0.9)	\$ (2.0)
Foreign exchange (gains) losses	(1.8)	3.8	1.7
Litigation charges, net	205.2	595.1	288.6
Restructuring and productivity initiative costs	30.4	41.5	11.8
Acquisition-related items	(1.3)	24.7	2.3
Gore Proceeds	—	(210.5)	—
Gain on sale of investment	—	—	(7.1)
Other, net	(1.5)	(4.5)	(4.4)
<b>Total other (income) expense, net</b>	<u>\$229.4</u>	<u>\$ 449.2</u>	<u>\$290.9</u>

*Litigation charges, net* – In 2016, the amount reflected the estimated costs for product liability matters, net of recoveries. In 2015, the amount reflected estimated costs for product liability matters, net of recoveries, litigation-related defense costs of \$15.1 million in connection with the 2014 WHP Pre-Trial Orders, and certain other litigation-related charges. In 2014, the amount reflected estimated costs for product liability matters, net of recoveries, and litigation-related defense costs of \$30.1 million in connection with the 2014 WHP Pre-Trial Orders. See Note 10 of the notes to consolidated financial statements.

*Restructuring and productivity initiative costs* – In 2016, 2015 and 2014, the amounts primarily reflected costs incurred in connection with productivity initiatives to optimize and streamline certain manufacturing and administrative functions to better align resources to the company’s business strategies. Key activities under these initiatives may include systems enhancements, the implementation of shared services centers designed to standardize and centralize certain functions or the outsourcing of certain services. Productivity initiative costs include consulting costs, primarily related to program creation and management, employee separation costs under the company’s existing severance program, and other related costs. In 2015 and 2014, employee separation costs of \$10.3 million and \$1.7 million, respectively, were recognized related to these initiatives. In 2015, the amount also reflected employee separation costs of \$7.9 million related to the elimination of certain positions and other terminations worldwide. In 2014, the amount also reflected employee separation costs of \$7.5 million primarily to improve the overall cost structure in certain of the company’s vascular businesses.

*Acquisition-related items* – The amounts for 2016, 2015 and 2014 consist of acquisition-related integration costs. The amounts for 2016 and 2015 also include acquisition-related purchase accounting adjustments. See Note 2 of the notes to consolidated financial statements.

*Gore Proceeds* – In 2015, Gore paid the company \$210.5 million, representing the total amount of the enhanced damages awarded by the U.S. District Court for the District of Arizona due to Gore’s willfulness in

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

connection with the company's lawsuit against Gore for infringing Bard's patent number 6,436,135 and an audit adjustment related to the payment of royalties through September 30, 2013 (the "Gore Proceeds").

**14. Other Comprehensive Income**

The changes in accumulated other comprehensive income (loss) by component are as follows:

(dollars in millions)	Derivative Instruments Designated as Cash Flow Hedges	Foreign Currency Translation Adjustments	Benefit Plans <sup>(C)</sup>	Total
Balance at December 31, 2013	\$ —	\$ 47.3	\$ (68.2)	\$ (20.9)
Other comprehensive income (loss) before reclassifications	2.5	(50.4)	(39.9)	(87.8)
Tax (provision) benefit <sup>(A)</sup>	(2.0)	—	14.9	12.9
Other comprehensive income (loss) before reclassifications, net of taxes	0.5	(50.4)	(25.0)	(74.9)
Reclassifications	0.6 <sup>(B)</sup>	—	10.1	10.7
Tax provision (benefit)	(0.2)	—	(3.5)	(3.7)
Reclassifications, net of tax	0.4	—	6.6	7.0
Other comprehensive income (loss)	0.9	(50.4)	(18.4)	(67.9)
Balance at December 31, 2014	\$ 0.9	\$ (3.1)	\$ (86.6)	\$ (88.8)
Other comprehensive income (loss) before reclassifications	\$ (2.6)	\$ (91.1)	\$ (40.9)	\$(134.6)
Tax (provision) benefit <sup>(A)</sup>	0.7	—	14.6	15.3
Other comprehensive income (loss) before reclassifications, net of taxes	(1.9)	(91.1)	(26.3)	(119.3)
Reclassifications	(11.1) <sup>(B)</sup>	—	12.1	1.0
Tax provision (benefit)	3.4	—	(4.3)	(0.9)
Reclassifications, net of tax	(7.7)	—	7.8	0.1
Other comprehensive income (loss)	(9.6)	(91.1)	(18.5)	(119.2)
Balance at December 31, 2015	\$ (8.7)	\$ (94.2)	\$(105.1)	\$(208.0)
Other comprehensive income (loss) before reclassifications	\$ (13.3)	\$ (21.8)	\$ (16.4)	\$ (51.5)
Tax (provision) benefit <sup>(A)</sup>	2.7	—	5.1	7.8
Other comprehensive income (loss) before reclassifications, net of taxes	(10.6)	(21.8)	(11.3)	(43.7)
Reclassifications	9.8 <sup>(B)</sup>	—	10.6	20.4
Tax provision (benefit)	(0.4)	—	(3.8)	(4.2)
Reclassifications, net of tax	9.4	—	6.8	16.2
Other comprehensive income (loss)	(1.2)	(21.8)	(4.5)	(27.5)
Balance at December 31, 2016	\$ (9.9)	\$ (116.0)	\$(109.6)	\$(235.5)

<sup>(A)</sup> Income taxes are not provided for foreign currency translation adjustments.

<sup>(B)</sup> See Note 6 of the notes to consolidated financial statements.

<sup>(C)</sup> These components are included in the computation of net periodic pension cost. See Note 12 of the notes to consolidated financial statements.

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**15. Segment Information**

The company's management considers its business to be a single segment entity – the manufacture and sale of medical devices. The company's products generally share similar distribution channels and customers. The company designs, develops, manufactures, packages, distributes and sells medical, surgical, diagnostic and patient care devices. The company sells a broad range of products to hospitals, individual healthcare professionals, extended care health facilities and alternate site facilities on a global basis. In general, the company's products are intended to be used once and then discarded or either temporarily or permanently implanted. The company's chief operating decision makers evaluate their various global product portfolios on a net sales basis and generally evaluate profitability and associated investment on an enterprise-wide basis due to shared geographic infrastructures.

Net sales based on the location of the external customer and identifiable assets by geographic region for the following years ended December 31 are:

(dollars in millions)	<u>2016</u>	<u>2015</u>	<u>2014</u>
Net sales			
United States	\$2,559.5	\$2,378.4	\$2,263.5
Europe	446.4	439.5	488.5
Asia-Pacific <sup>(A)</sup>	489.4	388.6	354.6
Other <sup>(A)</sup>	218.7	209.5	217.0
	<u>\$3,714.0</u>	<u>\$3,416.0</u>	<u>\$3,323.6</u>

<sup>(A)</sup> Beginning in 2016, net sales for Asia-Pacific are separately reported. Prior year amounts have been reclassified to conform to the current year presentation.

(dollars in millions)	<u>2016</u>	<u>2015</u>
Long-lived assets		
United States	\$410.3	\$398.5
Europe	48.7	49.5
Asia-Pacific <sup>(B)</sup>	24.8	19.0
Other <sup>(B)</sup>	5.7	5.4
	<u>\$489.5</u>	<u>\$472.4</u>

<sup>(B)</sup> Beginning in 2016, amounts for Asia-Pacific are separately reported. Prior year amounts have been reclassified to conform to the current year presentation.

Total net sales by product group category for the following years ended December 31 are:

(dollars in millions)	<u>2016</u>	<u>2015</u>	<u>2014</u>
Vascular	\$1,014.9	\$ 970.3	\$ 928.3
Urology	951.8	845.0	835.9
Oncology	1,012.1	936.9	910.9
Surgical Specialties	637.3	572.3	555.1
Other	97.9	91.5	93.4
	<u>\$3,714.0</u>	<u>\$3,416.0</u>	<u>\$3,323.6</u>

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**16. Unaudited Interim Financial Information**

<b>2016</b>	<b>1st Qtr</b>	<b>2nd Qtr</b>	<b>3rd Qtr</b>	<b>4th Qtr</b>	<b>Year</b>
<i>(dollars in millions except per share amounts)</i>					
Net sales	\$873.5	\$931.5	\$941.9	\$967.1	\$3,714.0
Cost of goods sold	320.4	351.0	352.2	348.1	1,371.7
Income from operations before income taxes	142.9	207.7	112.2	200.9	663.7
Net income	116.2	159.2	96.4	159.6	531.4
Basic earnings per share available to common shareholders	1.56	2.14	1.30	2.15	7.15
Diluted earnings per share available to common shareholders	1.54	2.11	1.27	2.11	7.03

The first quarter 2016 included litigation charges of \$48.9 million, net charges from acquisition-related items of \$4.5 million primarily consisting of a purchase accounting adjustment of \$5.8 million associated with the reversal of a liability with respect to certain revenue-based and manufacturing-related milestones, and restructuring and productivity initiative costs of \$9.8 million. These items decreased net income by \$39.4 million after tax, or \$0.52 diluted earnings per share available to common shareholders.

The second quarter 2016 included restructuring and productivity initiative costs of \$11.9 million, net charges from acquisition-related items of \$3.9 million primarily consisting of integration costs, and an asset impairment of \$1.2 million. These items decreased net income by \$11.3 million after tax, or \$0.15 diluted earnings per share available to common shareholders.

The third quarter 2016 included litigation charges of \$110.6 million, acquisition-related items of \$5.0 million primarily consisting of integration costs, and restructuring and productivity initiative costs of \$4.6 million. The income tax provision decreased \$2.6 million due to the completion of certain IRS examinations. These items decreased net income by \$81.5 million after tax, or \$1.08 diluted earnings per share available to common shareholders.

The fourth quarter 2016 included litigation charges, net, of \$45.7 million, a net benefit from acquisition-related items of \$6.8 million primarily consisting of a benefit of \$3.8 million related to integration costs and a benefit of \$3.7 million related to purchase accounting adjustments, and restructuring and productivity initiative costs of \$4.1 million. These items decreased net income by \$27.6 million after tax, or \$0.37 diluted earnings per share available to common shareholders.

<b>2015</b>	<b>1st Qtr</b>	<b>2nd Qtr</b>	<b>3rd Qtr</b>	<b>4th Qtr</b>	<b>Year</b>
<i>(dollars in millions except per share amounts)</i>					
Net sales	\$819.7	\$859.8	\$865.7	\$870.8	\$3,416.0
Cost of goods sold	311.2	333.7	336.3	320.0	1,301.2
Income (loss) from operations before income taxes	184.6	59.2	(52.4)	158.0	349.4
Net income (loss)	139.8	(54.7)	(86.0)	136.3	135.4
Basic earnings (loss) per share available to common shareholders <sup>(A)</sup>	1.85	(0.74)	(1.16)	1.82	1.80
Diluted earnings (loss) per share available to common shareholders <sup>(A)</sup>	1.82	(0.74) <sup>(B)</sup>	(1.16) <sup>(B)</sup>	1.79	1.77

<sup>(A)</sup> Total per share amounts may not add due to rounding.

<sup>(B)</sup> Common share equivalents primarily from share-based compensation plans were not included in the computation of diluted weighted average shares outstanding because their effect would have been antidilutive.

The first quarter 2015 included litigation charges of \$10.3 million, a net benefit from acquisition-related items of \$9.2 million primarily consisting of a purchase accounting adjustment of \$10.2 million associated with

**C. R. BARD, INC. AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

the reversal of a liability with respect to a certain revenue-based milestone, and restructuring and productivity initiative costs of \$3.9 million. These items decreased net income by \$2.6 million after tax, or \$0.03 diluted earnings per share available to common shareholders.

The second quarter 2015 included litigation charges, net, of \$343.7 million, a gain of \$210.5 million related to the Gore Proceeds, restructuring and productivity initiative costs of \$8.5 million, and net charges from acquisition-related items of \$4.5 million. These items increased net loss by \$209.0 million after tax, or \$2.73 diluted loss per share available to common shareholders.

The third quarter 2015 included litigation charges of \$241.1 million, restructuring and productivity initiative costs of \$14.6 million, and acquisition-related items of \$2.5 million primarily consisting of integration costs. These items increased net loss by \$240.5 million after tax, or \$3.14 diluted loss per share available to common shareholders.

The fourth quarter 2015 included net charges from acquisition-related items of \$33.9 million primarily consisting of purchase accounting adjustments of \$24.3 million and integration costs of \$5.4 million, restructuring and productivity initiative costs of \$14.5 million, and an asset impairment of \$4.5 million. These items decreased net income by \$28.3 million after tax, or \$0.37 diluted earnings per share available to common shareholders.

**C. R. BARD, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

***Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

Not applicable.

***Item 9A. Controls and Procedures***

The company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in the company's reports under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to the company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosures. Any controls and procedures, no matter how well defined and operated, can provide only reasonable assurance of achieving the desired control objectives.

The company's management, with the participation of the company's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of the company's disclosure controls and procedures as of December 31, 2016. Based upon that evaluation, the company's Chief Executive Officer and Chief Financial Officer have concluded that as of December 31, 2016, the design and operation of the company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) were effective to accomplish their objectives at the reasonable assurance level. The scope of management's assessment of the effectiveness of the design and operation of the company's disclosure controls and procedures as of December 31, 2016 includes all of the company's consolidated operations except for those disclosure controls and procedures of Liberator Medical Holdings, Inc. that are subsumed by internal control over financial reporting. The company acquired Liberator Medical Holdings, Inc. on January 21, 2016. Liberator Medical Holdings, Inc.'s operations represent 2.1% of the company's consolidated net sales for the year ended December 31, 2016 and assets associated with Liberator Medical Holdings, Inc.'s operations represent 0.4% of the company's consolidated total assets as of December 31, 2016. There have been no changes in the company's internal control over financial reporting that occurred during the quarter ended December 31, 2016, that have materially affected, or are reasonably likely to materially affect, the company's internal control over financial reporting.

Management's Report On Internal Control Over Financial Reporting is included in Item 8 and is incorporated herein by reference.

***Item 9B. Other Information***

None.

**PART III**

***Item 10. Directors, Executive Officers and Corporate Governance***

Information with respect to Directors of the company is incorporated herein by reference to the material contained under the heading “Proposal No. 1 — Election of Directors” in the company’s definitive Proxy Statement for its 2017 annual meeting of shareholders (the “2017 Proxy Statement”).

Information with respect to Executive Officers of the company is contained at the end of Part I of this filing under the heading “Executive Officers of the Registrant” and is incorporated by reference into this Item.

The information contained under the caption “Section 16(a) Beneficial Ownership Reporting Compliance” in the company’s 2017 Proxy Statement is incorporated herein by reference.

The information contained under the caption “Corporate Governance — The Board of Directors and Committees of the Board” in the company’s 2017 Proxy Statement is incorporated herein by reference.

**Code of Ethics**

The company has adopted, and has posted on its website at [www.crbard.com](http://www.crbard.com), a Business Ethics Policy, which includes a Code of Ethics for Senior Financial Officers that applies to the company’s Chief Executive Officer, Chief Financial Officer and Controller. To the extent required, the company intends to disclose any amendments to, or waivers from, the Code of Ethics on its website.

***Item 11. Executive Compensation***

The information contained under the captions “Executive Officer Compensation,” “Director Compensation,” “Corporate Governance — The Board of Directors and Committees of the Board — Compensation Committee — Compensation Committee Interlocks and Insider Participation” and “Executive Officer Compensation – Compensation Committee Report” in the company’s 2017 Proxy Statement is incorporated herein by reference.

***Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

The information contained under the captions “Security Ownership of Certain Beneficial Owners,” “Security Ownership of Management” and “Equity Compensation Plan Information” in the company’s 2017 Proxy Statement is incorporated herein by reference.

***Item 13. Certain Relationships and Related Transactions, and Director Independence***

The information contained under the captions “Related Person Transactions” and “Corporate Governance — Director Independence” in the company’s 2017 Proxy Statement is incorporated herein by reference.

***Item 14. Principal Accountant Fees and Services***

The information contained under the caption “Proposal No. 2 — Ratification of the Appointment of KPMG LLP as Independent Registered Public Accounting Firm” in the company’s 2017 Proxy Statement is incorporated herein by reference.



**PART IV**

**Item 15. Exhibits and Financial Statement Schedules**

(a)

**1. Financial Statements.** See Index to Consolidated Financial Statements at Item 8, page II-23 of this report.

**2. Financial Statement Schedules.**

Schedule II. Valuation and Qualifying Accounts for the years ended December 31, 2016, 2015 and 2014.

(dollars in millions)	<u>Balance Beginning of Year</u>	<u>Charges to Costs and Expenses</u>	<u>Deductions<sup>(1)</sup></u>	<u>Balance End of Year</u>
<b>Year Ended December 31, 2016</b>				
Allowance for inventory obsolescence	\$ 34.5	\$ 21.2	\$ (13.7)	\$ 42.0
Allowance for doubtful accounts	7.5	2.8	(3.1)	7.2
Totals	<u>\$ 42.0</u>	<u>\$ 24.0</u>	<u>\$ (16.8)</u>	<u>\$ 49.2</u>
(dollars in millions)	<u>Balance Beginning of Year</u>	<u>Charges to Costs and Expenses</u>	<u>Deductions<sup>(1)</sup></u>	<u>Balance End of Year</u>
<b>Year Ended December 31, 2015</b>				
Allowance for inventory obsolescence	\$ 36.5	\$ 26.3	\$ (28.3)	\$ 34.5
Allowance for doubtful accounts	10.1	1.1	(3.7)	7.5
Totals	<u>\$ 46.6</u>	<u>\$ 27.4</u>	<u>\$ (32.0)</u>	<u>\$ 42.0</u>
(dollars in millions)	<u>Balance Beginning of Year</u>	<u>Charges to Costs and Expenses</u>	<u>Deductions<sup>(1)</sup></u>	<u>Balance End of Year</u>
<b>Year Ended December 31, 2014</b>				
Allowance for inventory obsolescence	\$ 31.3	\$ 21.6	\$ (16.4)	\$ 36.5
Allowance for doubtful accounts	11.6	1.7	(3.2)	10.1
Totals	<u>\$ 42.9</u>	<u>\$ 23.3</u>	<u>\$ (19.6)</u>	<u>\$ 46.6</u>

<sup>(1)</sup> Includes writeoffs and the impact of foreign currency exchange rates.

All other schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

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### 3. Exhibits

The agreements and other documents filed as exhibits to this report are not intended to provide factual information or other disclosure other than with respect to the terms of the agreements or other documents themselves, and should not be relied upon for that purpose. In particular, any representations and warranties made by the company in these agreements or other documents were made solely within the specific context of the relevant agreement or document and may not describe the actual state of affairs as of the date they were made or at any other time.

<u>Number</u>	
3.1	Amended and Restated By-Laws, effective as of December 22, 2016, filed as Exhibit 3.1 to the company's December 23, 2016 Form 8-K, is incorporated herein by reference.
3.2	Restated Certificate of Incorporation, effective June 18, 2012, filed as Exhibit 3b to the company's June 15, 2012 Form 8-K, is incorporated herein by reference.
4.1	Form of Indenture, dated as of December 1, 1996 between C. R. Bard, Inc. and The Chase Manhattan Bank, N.A., as trustee, filed as Exhibit 4.1 to the company's Registration Statement on Form S-3, File No. 333-05997, is incorporated herein by reference.
4.2	Indenture, dated December 20, 2010, between C. R. Bard, Inc. and Wells Fargo Bank, National Association, as Trustee filed as Exhibit 4.1 to the company's December 20, 2010 Form 8-K, is incorporated herein by reference.
4.3	First Supplemental Indenture, dated December 20, 2010, between C. R. Bard, Inc. and Wells Fargo Bank, National Association, as Trustee filed as Exhibit 4.2 to the company's December 20, 2010 Form 8-K, is incorporated herein by reference.
4.4	Second Supplemental Indenture, dated October 30, 2012, between C. R. Bard, Inc. and Wells Fargo Bank, National Association, as Trustee filed as Exhibit 4.1 to the company's October 30, 2012 Form 8-K, is incorporated herein by reference.
4.5	Form of 2.875% Notes due 2016, filed as Exhibit 4.3 to the company's December 20, 2010 Form 8-K (included as Exhibit A in Exhibit 4.2 to the company's December 20, 2010 Form 8-K), is incorporated herein by reference.
4.6	Form of 4.400% Notes due 2021, filed as Exhibit 4.4 to the company's December 20, 2010 Form 8-K (included as Exhibit B in Exhibit 4.2 to the company's December 20, 2010 Form 8-K), is incorporated herein by reference.
4.7	Form of 1.375% Notes due 2018, filed as Exhibit 4.2 to the company's October 30, 2012 Form 8-K (included as Exhibit A in Exhibit 4.1 to the company's October 30, 2012 Form 8-K), is incorporated herein by reference.
4.8	Third Supplemental Indenture, dated May 9, 2016, between C. R. Bard, Inc. and Wells Fargo Bank, National Association, as Trustee filed as Exhibit 4.1 to the company's May 9, 2016 Form 8-K, is incorporated herein by reference.
4.9	Form of 3.000% Notes due 2026, filed as Exhibit 4.2 to the company's May 9, 2016 Form 8-K (included as Exhibit A in Exhibit 4.1 to the company's May 9, 2016 Form 8-K), is incorporated herein by reference.
10.1*	C. R. Bard, Inc. Agreement and Plans Trust amended and restated as of September 29, 2004, filed as Exhibit 10f to the company's December 31, 2004 Annual Report on Form 10-K, is incorporated herein by reference.
10.2*	C. R. Bard, Inc. Supplemental Executive Retirement Plan, as of July 13, 1988, filed as Exhibit 10p to the company's December 31, 1993 Annual Report on Form 10-K, is incorporated herein by reference.

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- 10.3\* 1993 Long Term Incentive Plan of C. R. Bard, Inc., as amended effective October 9, 2002, filed as Exhibit 10q to the company's September 30, 2002 Form 10-Q, is incorporated herein by reference.
- 10.4\* C. R. Bard, Inc. Management Stock Purchase Plan, amended and restated as of July 10, 2002, filed as Exhibit 10z to the company's December 31, 2002 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.5\* Letter agreement entered into by the company with John H. Weiland dated December 12, 1995, filed as Exhibit 10at to the company's December 31, 2004 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.6\* Form of Stock Option Agreement under the 2005 Directors' Stock Award Plan of C. R. Bard, Inc., filed as Exhibit 10ba to the company's June 30, 2005 Form 10-Q, is incorporated herein by reference.
- 10.7\* Stock Equivalent Plan for Outside Directors of C. R. Bard, Inc. (as Amended and Restated), effective as of December 14, 2011, filed as Exhibit 10bb to the company's December 31, 2011 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.8\* Form of Restricted Stock Award Agreement under the 2005 Directors' Stock Award Plan of C. R. Bard, Inc., filed as Exhibit 10bd to the company's September 30, 2005 Form 10-Q, is incorporated herein by reference.
- 10.9\* Form of Supplemental Insurance/Retirement Plan Agreement (as Amended and Restated) between the company and its executive officers, including each of its named executive officers, filed as Exhibit 10be to the company's September 30, 2005 Form 10-Q, is incorporated herein by reference.
- 10.10\* Form of Amended and Restated Change of Control Agreement between the company and its executive officers, including each of its named executive officers, filed as Exhibit 10bf to the company's September 30, 2005 Form 10-Q, is incorporated herein by reference.
- 10.11\* 2005 Directors' Stock Award Plan of C. R. Bard, Inc. (as Amended and Restated), filed as Exhibit 10bj to the company's March 31, 2006 Form 10-Q, is incorporated herein by reference.
- 10.12\* 1998 Employee Stock Purchase Plan of C. R. Bard, Inc. (as Amended and Restated), filed as Exhibit 10bk to the company's March 31, 2006 Form 10-Q, is incorporated herein by reference.
- 10.13\* Employee Stock Purchase Plan of C. R. Bard, Inc. (as Amended and Restated), filed as Exhibit B to the company's March 16, 2012 Schedule 14A, is incorporated herein by reference.
- 10.14\* Management Stock Purchase Program Elective and Premium Share Units Terms and Conditions (as Amended and Restated), under the company's 2003 Long Term Incentive Plan, filed as Exhibit 10bp to the company's December 31, 2007 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.15\* Form of Deferred Compensation Contract, Deferral of Directors' Fees of C. R. Bard, Inc. (as Amended and Restated) filed as Exhibit 10bq of the company's December 31, 2007 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.16\* Form of Aircraft Time Sharing Agreement between the company and certain of its named executive officers, filed as Exhibit 10bt to the company's September 30, 2008 Form 10-Q, is incorporated herein by reference.
- 10.17\* Executive Bonus Plan of C. R. Bard, Inc., effective as of January 1, 2009, filed as Exhibit 10bu to the company's December 31, 2008 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.18\* 2003 Long Term Incentive Plan of C. R. Bard, Inc. (as Amended and Restated), filed as Exhibit 10bw to the company's April 21, 2010 Form 8-K, is incorporated herein by reference.

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10.19*	2012 Long Term Incentive Plan of C. R. Bard, Inc. as amended and restated, filed as Exhibit A to the company's March 16, 2012 definitive Proxy Statement on Schedule 14A, is incorporated herein by reference.
10.20*	2005 Directors' Stock Award Plan of C. R. Bard, Inc. (as Amended and Restated) (effective as of December 8, 2010), filed as Exhibit 10bw to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.
10.21*	Executive Choice Plan of C. R. Bard, Inc., filed as Exhibit 10bx to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.
10.22*	Form of Stock Option Award Certificate and Form of Stock Option Terms and Conditions under the Company's 2003 Long Term Incentive Plan, filed as Exhibit 10by to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.
10.23*	Form of Restricted Stock Award Certificate and Form of Restricted Stock/Restricted Stock Units Terms and Conditions under the Company's 2003 Long Term Incentive Plan, filed as Exhibit 10bz to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.
10.24*	Form of Change of Control Agreement between the company and certain of its officers, filed as Exhibit 10ca to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.
10.25	Master confirmation agreement with Goldman, Sachs & Co., dated as of December 15, 2010, between Goldman, Sachs & Co. and C. R. Bard, Inc., filed as Exhibit 10cb to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.***
10.26	Supplemental confirmation agreement, dated as of December 15, 2010, between Goldman, Sachs & Co. and C. R. Bard, Inc., filed as Exhibit 10cc to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.***
10.27	Credit Agreement dated as of October 12, 2011, among C. R. Bard, Inc., J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated (as Joint Lead Arrangers and Joint Bookrunners), JPMorgan Chase Bank, N.A. (as Administrative Agent), Bank of America, N.A. (as Syndication Agent) and Barclays Bank PLC, Goldman Sachs Bank USA, Wells Fargo Bank, National Association and Royal Bank of Canada (each as Documentation Agents), filed as Exhibit 10ce to the company's September 30, 2011 Form 10-Q, is incorporated herein by reference.
10.28	Cooperation Agreement, dated January 20, 2012, by and among C. R. Bard, Inc., ValueAct Capital Master Fund, L.P., VA Partners I, LLC, ValueAct Capital Management, L.P., ValueAct Capital Management, LLC and G. Mason Morfit, filed as Exhibit 10cf to the company's January 20, 2012 Form 8-K, is incorporated herein by reference.
10.29*	Form of Restricted Stock Units Award Certificate and Form of Restricted Stock Units Terms and Conditions under the Company's 2003 Long Term Incentive Plan, filed as Exhibit 10cg to the company's December 31, 2011 Annual Report on Form 10-K, is incorporated herein by reference.
10.30*	Form of Performance Long-Term Incentive Award Certificate and Form of Performance Long-Term Incentive Award Terms and Conditions under the Company's 2003 Long Term Incentive Plan, filed as Exhibit 10ci to the company's March 31, 2012 Form 10-Q, is incorporated herein by reference.
10.31*	Incentive-Based Compensation Recovery ("Clawback") Policy, titled as Exhibit 10.31 to the company's December 31, 2014 Form 10-K, is incorporated herein by reference.
10.32*	2005 Directors' Stock Award Plan of C. R. Bard, Inc. (as Amended and Restated), filed as Exhibit 10.32 to the company's December 31, 2012 Annual Report on Form 10-K, is incorporated herein by reference.

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- 10.33\* 2012 Long Term Incentive Plan of C. R. Bard, Inc. as amended and restated, filed as Exhibit 10.34 to the company's April 19, 2013 Form 8-K, is incorporated herein by reference.
- 10.34\* 2005 Directors' Stock Award Plan of C. R. Bard, Inc. (as Amended and Restated), filed as Exhibit 10.34 to the company's September 30, 2013 Form 10-Q, is incorporated herein by reference.
- 10.35 Amendment No. 1, dated as of September 26, 2013, to Credit Agreement dated as of October 12, 2011, among C. R. Bard, Inc., J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated (as Joint Lead Arrangers and Joint Bookrunners), JPMorgan Chase Bank, N.A. (as Administrative Agent), Bank of America, N.A. (as Syndication Agent) and Barclays Bank PLC, Goldman Sachs Bank USA, Wells Fargo Bank, National Association and Royal Bank of Canada (each as Documentation Agents), filed as Exhibit 10.35 to the company's September 30, 2013 Form 10-Q, is incorporated herein by reference.
- 10.36\* Form of Restricted Stock Units Award Certificate and Form of Restricted Stock Units Terms and Conditions under the company's 2012 Long Term Incentive Plan, filed as Exhibit 10.36 to the company's December 31, 2013 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.37\* Form of Stock Option Award Certificate and Form of Stock Option Terms and Conditions under the company's 2012 Long Term Incentive Plan, filed as Exhibit 10.37 to the company's December 31, 2013 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.38\* Executive Bonus Plan of C. R. Bard, Inc., effective January 1, 2014, filed as Exhibit 10.39 to the company's March 31, 2014 Form 10-Q, is incorporated herein by reference.
- 10.39\* 2012 Long Term Incentive Plan of C. R. Bard, Inc. (as Amended and Restated), effective April 16, 2014, filed as Exhibit 10.38 to the company's April 17, 2014 Form 8-K, is incorporated herein by reference.
- 10.40 Amendment No. 2, dated as of November 18, 2014, to Credit Agreement dated as of October 12, 2011, among C. R. Bard, Inc., J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated (as Joint Lead Arrangers and Joint Bookrunners), JPMorgan Chase Bank, N.A. (as Administrative Agent), Bank of America, N.A. (as Syndication Agent) and Barclays Bank PLC, Goldman Sachs Bank USA, Wells Fargo Bank, National Association and Royal Bank of Canada (each as Documentation Agents), filed as Exhibit 10.40 to the company's December 31, 2014 Form 10-K, is incorporated herein by reference.
- 10.41 2012 Long-Term Incentive Plan of C. R. Bard, Inc. (as Amended and Restated), effective April 15, 2015, filed as Exhibit 10.41 to the company's April 17, 2015 Form 8-K, is incorporated herein by reference.
- 10.42 Amendment No. 3, dated as of November 23, 2015, to Credit Agreement dated as of October 12, 2011, among C. R. Bard, Inc., J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated (as Joint Lead Arrangers and Joint Bookrunners), JPMorgan Chase Bank, N.A. (as Administrative Agent), Bank of America, N.A. (as Syndication Agent) and Barclays Bank PLC, Goldman Sachs Bank USA, Wells Fargo Bank, National Association and Royal Bank of Canada (each as Documentation Agents), filed as Exhibit 10.42 to the company's December 31, 2015 Form 10-K, is incorporated herein by reference.
- 10.43 Amendment No. 4, dated as of November 22, 2016, to Credit Agreement dated as of October 12, 2011, among C. R. Bard, Inc., JPMorgan Chase Bank, N.A., Merrill Lynch, Pierce, Fenner & Smith Incorporated and U.S. Bank National Association (as Joint Lead Arrangers and Joint Bookrunners), JPMorgan Chase Bank, N.A. (as Administrative Agent), Bank of America, N.A. and U.S. Bank National Association (as Syndication Agents) and Barclays Bank PLC, Goldman Sachs Bank USA, Wells Fargo Bank, National Association, Royal Bank of Canada, TD Bank, N.A., The Bank of Tokyo-Mitsubishi UFJ, Ltd., Mizuho Bank, Ltd. and Bank of China, New York Branch (each as Documentation Agents).\*\*

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12.1	Computation of Ratio of Earnings to Fixed Charges**
21	Subsidiaries of the Registrant**
23.1	Consent of Independent Registered Public Accounting Firm**
31.1	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer**
31.2	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer**
32.1	Section 1350 Certification of Chief Executive Officer**
32.2	Section 1350 Certification of Chief Financial Officer**
99	Form of indemnity agreement between the company and each of its directors and officers, filed as Exhibit 99 to the company's December 31, 1993 Annual Report on Form 10-K, is incorporated herein by reference.
101.INS	XBRL Instance Document**
101.SCH	XBRL Taxonomy Extension Schema Document**
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document**
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document**
101.LAB	XBRL Taxonomy Extension Label Linkbase Document**
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document**
*	Each of these exhibits constitutes a management contract or a compensatory plan or arrangement.
**	Filed herewith.
***	An application for confidential treatment for selected portions of these agreements was granted by the Securities and Exchange Commission.

**Item 16. Form 10-K Summary**

Not applicable.



**Index to Exhibits**

<u>Number</u>	
3.1	Amended and Restated By-Laws, effective as of December 22, 2016, filed as Exhibit 3.1 to the company's December 23, 2016 Form 8-K, is incorporated herein by reference.
3.2	Restated Certificate of Incorporation, effective June 18, 2012, filed as Exhibit 3b to the company's June 15, 2012 Form 8-K, is incorporated herein by reference.
4.1	Form of Indenture, dated as of December 1, 1996 between C. R. Bard, Inc. and The Chase Manhattan Bank, N.A., as trustee, filed as Exhibit 4.1 to the company's Registration Statement on Form S-3, File No. 333-05997, is incorporated herein by reference.
4.2	Indenture, dated December 20, 2010, between C. R. Bard, Inc. and Wells Fargo Bank, National Association, as Trustee filed as Exhibit 4.1 to the company's December 20, 2010 Form 8-K, is incorporated herein by reference.
4.3	First Supplemental Indenture, dated December 20, 2010, between C. R. Bard, Inc. and Wells Fargo Bank, National Association, as Trustee filed as Exhibit 4.2 to the company's December 20, 2010 Form 8-K, is incorporated herein by reference.
4.4	Second Supplemental Indenture, dated October 30, 2012, between C. R. Bard, Inc. and Wells Fargo Bank, National Association, as Trustee filed as Exhibit 4.1 to the company's October 30, 2012 Form 8-K, is incorporated herein by reference.
4.5	Form of 2.875% Notes due 2016, filed as Exhibit 4.3 to the company's December 20, 2010 Form 8-K (included as Exhibit A in Exhibit 4.2 to the company's December 20, 2010 Form 8-K), is incorporated herein by reference.
4.6	Form of 4.400% Notes due 2021, filed as Exhibit 4.4 to the company's December 20, 2010 Form 8-K (included as Exhibit B in Exhibit 4.2 to the company's December 20, 2010 Form 8-K), is incorporated herein by reference.
4.7	Form of 1.375% Notes due 2018, filed as Exhibit 4.2 to the company's October 30, 2012 Form 8-K (included as Exhibit A in Exhibit 4.1 to the company's October 30, 2012 Form 8-K), is incorporated herein by reference.
4.8	Third Supplemental Indenture, dated May 9, 2016, between C. R. Bard, Inc. and Wells Fargo Bank, National Association, as Trustee filed as Exhibit 4.1 to the company's May 9, 2016 Form 8-K, is incorporated herein by reference.
4.9	Form of 3.000% Notes due 2026, filed as Exhibit 4.2 to the company's May 9, 2016 Form 8-K (included as Exhibit A in Exhibit 4.1 to the company's May 9, 2016 Form 8-K), is incorporated herein by reference.
10.1*	C. R. Bard, Inc. Agreement and Plans Trust amended and restated as of September 29, 2004, filed as Exhibit 10f to the company's December 31, 2004 Annual Report on Form 10-K, is incorporated herein by reference.
10.2*	C. R. Bard, Inc. Supplemental Executive Retirement Plan, as of July 13, 1988, filed as Exhibit 10p to the company's December 31, 1993 Annual Report on Form 10-K, is incorporated herein by reference.
10.3*	1993 Long Term Incentive Plan of C. R. Bard, Inc., as amended effective October 9, 2002, filed as Exhibit 10q to the company's September 30, 2002 Form 10-Q, is incorporated herein by reference.
10.4*	C. R. Bard, Inc. Management Stock Purchase Plan, amended and restated as of July 10, 2002, filed as Exhibit 10z to the company's December 31, 2002 Annual Report on Form 10-K, is incorporated herein by reference.



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- 10.5\* Letter agreement entered into by the company with John H. Weiland dated December 12, 1995, filed as Exhibit 10at to the company's December 31, 2004 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.6\* Form of Stock Option Agreement under the 2005 Directors' Stock Award Plan of C. R. Bard, Inc., filed as Exhibit 10ba to the company's June 30, 2005 Form 10-Q, is incorporated herein by reference.
- 10.7\* Stock Equivalent Plan for Outside Directors of C. R. Bard, Inc. (as Amended and Restated), effective as of December 14, 2011, filed as Exhibit 10bb to the company's December 31, 2011 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.8\* Form of Restricted Stock Award Agreement under the 2005 Directors' Stock Award Plan of C. R. Bard, Inc., filed as Exhibit 10bd to the company's September 30, 2005 Form 10-Q, is incorporated herein by reference.
- 10.9\* Form of Supplemental Insurance/Retirement Plan Agreement (as Amended and Restated) between the company and its executive officers, including each of its named executive officers, filed as Exhibit 10be to the company's September 30, 2005 Form 10-Q, is incorporated herein by reference.
- 10.10\* Form of Amended and Restated Change of Control Agreement between the company and its executive officers, including each of its named executive officers, filed as Exhibit 10bf to the company's September 30, 2005 Form 10-Q, is incorporated herein by reference.
- 10.11\* 2005 Directors' Stock Award Plan of C. R. Bard, Inc. (as Amended and Restated), filed as Exhibit 10bj to the company's March 31, 2006 Form 10-Q, is incorporated herein by reference.
- 10.12\* 1998 Employee Stock Purchase Plan of C. R. Bard, Inc. (as Amended and Restated), filed as Exhibit 10bk to the company's March 31, 2006 Form 10-Q, is incorporated herein by reference.
- 10.13\* Employee Stock Purchase Plan of C. R. Bard, Inc. (as Amended and Restated), filed as Exhibit B to the company's March 16, 2012 Schedule 14A, is incorporated herein by reference.
- 10.14\* Management Stock Purchase Program Elective and Premium Share Units Terms and Conditions (as Amended and Restated), under the company's 2003 Long Term Incentive Plan, filed as Exhibit 10bp to the company's December 31, 2007 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.15\* Form of Deferred Compensation Contract, Deferral of Directors' Fees of C. R. Bard, Inc. (as Amended and Restated) filed as Exhibit 10bq of the company's December 31, 2007 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.16\* Form of Aircraft Time Sharing Agreement between the company and certain of its named executive officers, filed as Exhibit 10bt to the company's September 30, 2008 Form 10-Q, is incorporated herein by reference.
- 10.17\* Executive Bonus Plan of C. R. Bard, Inc., effective as of January 1, 2009, filed as Exhibit 10bu to the company's December 31, 2008 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.18\* 2003 Long Term Incentive Plan of C. R. Bard, Inc. (as Amended and Restated), filed as Exhibit 10bw to the company's April 21, 2010 Form 8-K, is incorporated herein by reference.
- 10.19\* 2012 Long Term Incentive Plan of C. R. Bard, Inc. as amended and restated, filed as Exhibit A to the company's March 16, 2012 definitive Proxy Statement on Schedule 14A, is incorporated herein by reference.
- 10.20\* 2005 Directors' Stock Award Plan of C. R. Bard, Inc. (as Amended and Restated) (effective as of December 8, 2010), filed as Exhibit 10bw to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.
- 10.21\* Executive Choice Plan of C. R. Bard, Inc., filed as Exhibit 10bx to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.

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<u>Number</u>	
10.22*	Form of Stock Option Award Certificate and Form of Stock Option Terms and Conditions under the Company's 2003 Long Term Incentive Plan, filed as Exhibit 10by to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.
10.23*	Form of Restricted Stock Award Certificate and Form of Restricted Stock/Restricted Stock Units Terms and Conditions under the Company's 2003 Long Term Incentive Plan, filed as Exhibit 10bz to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.
10.24*	Form of Change of Control Agreement between the company and certain of its officers, filed as Exhibit 10ca to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.
10.25	Master confirmation agreement with Goldman, Sachs & Co., dated as of December 15, 2010, between Goldman, Sachs & Co. and C. R. Bard, Inc., filed as Exhibit 10cb to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.***
10.26	Supplemental confirmation agreement, dated as of December 15, 2010, between Goldman, Sachs & Co. and C. R. Bard, Inc., filed as Exhibit 10cc to the company's December 31, 2010 Annual Report on Form 10-K, is incorporated herein by reference.***
10.27	Credit Agreement dated as of October 12, 2011, among C. R. Bard, Inc., J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated (as Joint Lead Arrangers and Joint Bookrunners), JPMorgan Chase Bank, N.A. (as Administrative Agent), Bank of America, N.A. (as Syndication Agent) and Barclays Bank PLC, Goldman Sachs Bank USA, Wells Fargo Bank, National Association and Royal Bank of Canada (each as Documentation Agents), filed as Exhibit 10ce to the company's September 30, 2011 Form 10-Q, is incorporated herein by reference.
10.28	Cooperation Agreement, dated January 20, 2012, by and among C. R. Bard, Inc., ValueAct Capital Master Fund, L.P., VA Partners I, LLC, ValueAct Capital Management, L.P., ValueAct Capital Management, LLC and G. Mason Morfit, filed as Exhibit 10cf to the company's January 20, 2012 Form 8-K, is incorporated herein by reference.
10.29*	Form of Restricted Stock Units Award Certificate and Form of Restricted Stock Units Terms and Conditions under the Company's 2003 Long Term Incentive Plan, filed as Exhibit 10cg to the company's December 31, 2011 Annual Report on Form 10-K, is incorporated herein by reference.
10.30*	Form of Performance Long-Term Incentive Award Certificate and Form of Performance Long-Term Incentive Award Terms and Conditions under the Company's 2003 Long Term Incentive Plan, filed as Exhibit 10ci to the company's March 31, 2012 Form 10-Q, is incorporated herein by reference.
10.31*	Incentive-Based Compensation Recovery ("Clawback") Policy, titled as Exhibit 10.31 to the company's December 31, 2014 Form 10-K, is incorporated herein by reference.
10.32*	2005 Directors' Stock Award Plan of C. R. Bard, Inc. (as Amended and Restated), filed as Exhibit 10.32 to the company's December 31, 2012 Annual Report on Form 10-K, is incorporated herein by reference.
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10.35	Amendment No. 1, dated as of September 26, 2013, to Credit Agreement dated as of October 12, 2011, among C. R. Bard, Inc., J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated (as Joint Lead Arrangers and Joint Bookrunners), JPMorgan Chase Bank, N.A. (as Administrative Agent), Bank of America, N.A. (as Syndication Agent) and Barclays Bank PLC, Goldman Sachs Bank USA, Wells Fargo Bank, National Association and Royal Bank of Canada (each as Documentation Agents), filed as Exhibit 10.35 to the company's September 30, 2013 Form 10-Q, is incorporated herein by reference.

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<u>Number</u>	
10.36*	Form of Restricted Stock Units Award Certificate and Form of Restricted Stock Units Terms and Conditions under the company's 2012 Long Term Incentive Plan, filed as Exhibit 10.36 to the company's December 31, 2013 Annual Report on Form 10-K, is incorporated herein by reference.
10.37*	Form of Stock Option Award Certificate and Form of Stock Option Terms and Conditions under the company's 2012 Long Term Incentive Plan, filed as Exhibit 10.37 to the company's December 31, 2013 Annual Report on Form 10-K, is incorporated herein by reference.
10.38*	Executive Bonus Plan of C. R. Bard, Inc., effective January 1, 2014, filed as Exhibit 10.39 to the company's March 31, 2014 Form 10-Q, is incorporated herein by reference.
10.39*	2012 Long Term Incentive Plan of C. R. Bard, Inc. (as Amended and Restated), effective April 16, 2014, filed as Exhibit 10.38 to the company's April 17, 2014 Form 8-K, is incorporated herein by reference.
10.40	Amendment No. 2, dated as of November 18, 2014, to Credit Agreement dated as of October 12, 2011, among C. R. Bard, Inc., J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated (as Joint Lead Arrangers and Joint Bookrunners), JPMorgan Chase Bank, N.A. (as Administrative Agent), Bank of America, N.A. (as Syndication Agent) and Barclays Bank PLC, Goldman Sachs Bank USA, Wells Fargo Bank, National Association and Royal Bank of Canada (each as Documentation Agents), filed as Exhibit 10.40 to the company's December 31, 2014 Form 10-K, is incorporated herein by reference.
10.41	2012 Long-Term Incentive Plan of C. R. Bard, Inc. (as Amended and Restated), effective April 15, 2015, filed as Exhibit 10.41 to the company's April 17, 2015 Form 8-K, is incorporated herein by reference.
10.42	Amendment No. 3, dated as of November 23, 2015, to Credit Agreement dated as of October 12, 2011, among C. R. Bard, Inc., J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated (as Joint Lead Arrangers and Joint Bookrunners), JPMorgan Chase Bank, N.A. (as Administrative Agent), Bank of America, N.A. (as Syndication Agent) and Barclays Bank PLC, Goldman Sachs Bank USA, Wells Fargo Bank, National Association and Royal Bank of Canada (each as Documentation Agents), filed as Exhibit 10.42 to the company's December 31, 2015 Form 10-K, is incorporated herein by reference.
10.43	Amendment No. 4, dated as of November 22, 2016, to Credit Agreement dated as of October 12, 2011, among C. R. Bard, Inc., JPMorgan Chase Bank, N.A., Merrill Lynch, Pierce, Fenner & Smith Incorporated and U.S. Bank National Association (as Joint Lead Arrangers and Joint Bookrunners), JPMorgan Chase Bank, N.A. (as Administrative Agent), Bank of America, N.A. and U.S. Bank National Association (as Syndication Agents) and Barclays Bank PLC, Goldman Sachs Bank USA, Wells Fargo Bank, National Association, Royal Bank of Canada, TD Bank, N.A., The Bank of Tokyo-Mitsubishi UFJ, Ltd., Mizuho Bank, Ltd. and Bank of China, New York Branch (each as Documentation Agents).**
12.1	Computation of Ratio of Earnings to Fixed Charges**
21	Subsidiaries of the Registrant**
23.1	Consent of Independent Registered Public Accounting Firm**
31.1	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer**
31.2	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer**
32.1	Section 1350 Certification of Chief Executive Officer**
32.2	Section 1350 Certification of Chief Financial Officer**
99	Form of indemnity agreement between the company and each of its directors and officers, filed as Exhibit 99 to the company's December 31, 1993 Annual Report on Form 10-K, is incorporated herein by reference.

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Number

101.INS	XBRL Instance Document**
101.SCH	XBRL Taxonomy Extension Schema Document**
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document**
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document**
101.LAB	XBRL Taxonomy Extension Label Linkbase Document**
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document**
*	Each of these exhibits constitutes a management contract or a compensatory plan or arrangement.
**	Filed herewith.
***	An application for confidential treatment for selected portions of these agreements was granted by the Securities and Exchange Commission.

## AMENDMENT NO. 4

Dated as of November 22, 2016

to

## CREDIT AGREEMENT

Dated as of October 12, 2011

THIS AMENDMENT NO. 4 (this "Amendment") is made as of November 22, 2016 by and among C. R. Bard, Inc., a New Jersey corporation (the "Borrower"), the financial institutions listed on the signature pages hereof and JPMorgan Chase Bank, N.A., as Administrative Agent (the "Administrative Agent"), under that certain Credit Agreement dated as of October 12, 2011 by and among the Borrower, the Lenders from time to time party thereto and the Administrative Agent (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"). Capitalized terms used herein and not otherwise defined herein shall have the respective meanings given to them in the Credit Agreement.

WHEREAS, the Borrower has requested that the requisite Lenders and the Administrative Agent agree to make certain amendments to the Credit Agreement;

WHEREAS, the Borrower, the Lenders party hereto and the Administrative Agent have so agreed on the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the premises set forth above, the terms and conditions contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Borrower, the Lenders party hereto and the Administrative Agent hereby agree to enter into this Amendment.

1. Amendments to the Credit Agreement. Effective as of the Amendment No. 4 Effective Date (as defined below), the parties hereto agree that the Credit Agreement shall be amended as follows:

(a) JPMorgan Chase Bank, N.A. is hereby designated as a Joint Lead Arranger and a Joint Bookrunner in respect of the credit facility evidenced by the Credit Agreement as amended hereby. Accordingly, the cover page of the Credit Agreement is hereby amended to add a reference to JPMorgan Chase Bank, N.A. as a Joint Lead Arranger and as a Joint Bookrunner.

(b) J.P. Morgan Securities LLC is hereby removed as a Joint Lead Arranger and a Joint Bookrunner in respect of the credit facility evidenced by the Credit Agreement as amended hereby. Accordingly, the cover page of the Credit Agreement is hereby amended to delete the reference to J.P. Morgan Securities LLC as a Joint Lead Arranger and as a Joint Bookrunner.

(c) U.S. Bank National Association is hereby designated as a Syndication Agent and as a Joint Lead Arranger and a Joint Bookrunner in respect of the credit facility evidenced by the Credit Agreement as amended hereby. Accordingly, the cover page of the Credit Agreement is hereby amended to (i) add a reference to U.S. Bank National Association as a Syndication Agent and (ii) add a reference to U.S. Bank National Association as a Joint Lead Arranger and as a Joint Bookrunner.

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(d) Each of TD Bank, N.A., The Bank of Tokyo-Mitsubishi UFJ, Ltd., Mizuho Bank, Ltd. and Bank of China, New York Branch was previously designated as a Documentation Agent in respect of the credit facility evidenced by the Credit Agreement as amended hereby. Accordingly, the cover page of the Credit Agreement is hereby amended to add a reference to each of TD Bank, N.A., The Bank of Tokyo-Mitsubishi UFJ, Ltd., Mizuho Bank, Ltd. and Bank of China, New York Branch as a Documentation Agent.

(e) The definition of “Commitment” appearing in Section 1.01 of the Credit Agreement is amended to restate the final two sentences thereof in their entirety to read as follows:

The amount of each Lender’s Commitment as of the Amendment No. 4 Effective Date is set forth on Schedule 1.01, or in the Assignment and Assumption or other agreement pursuant to which such Lender shall have assumed its Commitment, as applicable. As of the Amendment No. 4 Effective Date, the aggregate amount of the Commitments is \$1,000,000,000.

(f) The definition of “Defaulting Lender” appearing in Section 1.01 of the Credit Agreement is amended to restate clause (d) thereof in its entirety to read as follows:

(d) has become the subject of (A) a Bankruptcy Event or (B) a Bail-In Action

(g) The definition of “Commitment Termination Date” appearing in Section 1.01 of the Credit Agreement is amended to delete the reference to “November 23, 2020” appearing therein and to replace such reference with “November 22, 2021”.

(h) The definition of “Issuing Bank” appearing in Section 1.01 of the Credit Agreement is amended to delete the reference to “(b) Bank of America, N.A. and (c) each other Lender selected” appearing therein and to replace such reference with “(b) Bank of America, N.A., (c) U.S. Bank National Association and (d) each other Lender selected”.

(i) Section 1.01 of the Credit Agreement is amended to add the following definitions thereto in proper alphabetical order and, where applicable, replace the corresponding previously existing definitions:

“Amendment No. 4 Effective Date” means November 22, 2016.

“Applicable L/C Sublimit” means (i) with respect to JPMCB in its capacity as an Issuing Bank under this Agreement, \$33,333,334, (ii) with respect to Bank of America, N.A. in its capacity as an Issuing Bank under this Agreement, \$33,333,333, (iii) with respect to U.S. Bank National Association in its capacity as an Issuing Bank under this Agreement, \$33,333,333 and (iv) with respect to any other Person that becomes an Issuing Bank pursuant to the terms of this Agreement, such amount as agreed to in writing by the Borrower, the Administrative Agent and such Person at the time such Person becomes an Issuing Bank pursuant to the terms of the Agreement, as each of the foregoing amounts may be amended from time to time with the written consent of the Borrower, the Administrative Agent and the Issuing Banks (such consents not to be unreasonably withheld or delayed).

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“Bail-In Action” means the exercise of any Write-Down and Conversion Powers by the applicable EEA Resolution Authority in respect of any liability of an EEA Financial Institution.

“Bail-In Legislation” means, with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule.

“EEA Financial Institution” means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

“EEA Member Country” means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

“EEA Resolution Authority” means any public administrative authority or any Person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

“EU Bail-In Legislation Schedule” means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor Person), as in effect from time to time.

“Joint Lead Arrangers” means the Joint Lead Arrangers and Joint Bookrunners listed on the cover page of this Agreement. The parties hereby agree that Merrill Lynch, Price, Fenner and Smith Incorporated may, without notice to Borrower, assign its rights and obligations as a Joint Lead Arranger under this Credit Agreement to any other registered broker-dealer wholly-owned by Bank of America Corporation to which all or substantially all of Bank of America Corporation’s or any of its subsidiaries’ investment banking, commercial lending services or related businesses may be transferred following the Amendment No. 4 Effective Date.

“Write-Down and Conversion Powers” means, with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule.

(j) Article VIII of the Credit Agreement is amended to delete the reference to “the Syndication Agent” appearing in the last paragraph thereof and to replace such reference with “the Syndication Agents”.

(k) A new Section 9.16 is added to the Credit Agreement immediately following Section 9.15 of the Credit Agreement as follows:

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SECTION 9.16. Acknowledgement and Consent to Bail-In of EEA Financial Institutions. Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any EEA Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of an EEA Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

(a) the application of any Write-Down and Conversion Powers by an EEA Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an EEA Financial Institution; and

(b) the effects of any Bail-In Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such EEA Financial Institution, its parent entity, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of any EEA Resolution Authority.

(l) Schedule 1.01 to the Credit Agreement is amended and restated in its entirety in the form of Schedule 1.01 attached hereto.

2. Conditions of Effectiveness. The effectiveness of this Amendment (the "Amendment No. 4 Effective Date") is subject to the satisfaction of the following conditions precedent:

(a) The Administrative Agent shall have received counterparts of this Amendment duly executed by the Borrower, the Lenders, the Issuing Banks, the Swingline Lender and the Administrative Agent.

(b) The Administrative Agent shall have received a favorable written opinion (addressed to the Administrative Agent and the Lenders and dated the Amendment No. 4 Effective Date) of Weil, Gotshal & Manges LLP, special New York counsel for the Borrower, covering such matters relating to the Borrower, this Amendment or the Credit Agreement as amended hereby as the Administrative Agent shall reasonably request (and the Borrower hereby instructs such counsel to deliver such opinion to the Lenders and the Administrative Agent).

(c) The Administrative Agent shall have received such documents and certificates as the Administrative Agent or its counsel may reasonably request relating to the organization, existence and good standing of the Borrower, the authorization of this Amendment and the Credit Agreement as amended hereby, and any other matters relevant hereto, all in form and substance reasonably satisfactory to the Administrative Agent and its counsel.

(d) The Administrative Agent shall have received a certificate, dated the Amendment No. 4 Effective Date and signed by the President, a Vice President or a Financial Officer of the Borrower, confirming compliance with the conditions set forth in clauses (a) and (b) of the first sentence of Section 4.02 of the Credit Agreement (excluding, however, the first parenthetical clause in such clause (a)).



(e) The Administrative Agent shall have received, for the account of each Lender, an upfront fee in an amount equal to the amount previously disclosed to the Lenders.

(f) The Administrative Agent shall have received payment of the Administrative Agent's and its affiliates' fees and reasonable out-of-pocket expenses (including the reasonable fees and expenses of Latham & Watkins LLP, counsel to the Administrative Agent, that are due and payable on or prior to the Amendment No. 4 Effective Date and for which an invoice has been presented to the Borrower at least one Business Day prior to the Amendment No. 4 Effective Date) in connection with this Amendment.

3. Representations and Warranties of the Borrower. The Borrower hereby represents and warrants as follows:

(a) This Amendment and the Credit Agreement as modified hereby constitute legal, valid and binding obligations of the Borrower, enforceable in accordance with their terms, except as such enforceability may be limited by (a) bankruptcy, insolvency, reorganization, moratorium or similar laws of general applicability affecting the enforcement of creditors' rights and (b) the application of general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

(b) As of the date hereof and after giving effect to the terms of this Amendment, (i) no Default has occurred and is continuing and (ii) the representations and warranties of the Borrower set forth in the Credit Agreement are true and correct in all material respects (or, in the case of any such representations and warranties qualified as to materiality, in all respects) on and as of the date hereof (or, if any such representation or warranty is expressly stated to have been made as of a specific date, as of such specific date).

4. Reference to and Effect on the Credit Agreement.

(a) Upon the effectiveness hereof, each reference to the Credit Agreement in the Credit Agreement or any other Loan Document shall mean and be a reference to the Credit Agreement as amended hereby.

(b) The Credit Agreement and all other documents, instruments and agreements executed and/or delivered in connection therewith shall remain in full force and effect and are hereby ratified and confirmed.

(c) Except as expressly set forth herein, the execution, delivery and effectiveness of this Amendment shall not operate as a waiver of any right, power or remedy of the Administrative Agent or the Lenders, nor constitute a waiver of any provision of the Credit Agreement or any other documents, instruments and agreements executed and/or delivered in connection therewith.

(d) On the Amendment No. 4 Effective Date, the Administrative Agent shall make such reallocations of each Lender's Applicable Percentage of the Revolving Credit Exposure under the Credit Agreement as are necessary in order that the Revolving Credit Exposure with respect to such Lender reflects such Lender's Applicable Percentage of the Revolving Credit Exposure under the Credit Agreement as amended hereby. Each Lender hereby waives any compensation by the Borrower of any

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and all losses, costs and expenses incurred by such Lender solely in connection with the sale and assignment of any Eurodollar Loans and the reallocation described in this clause (d) and occurring on the Amendment No. 4 Effective Date that would otherwise be due to such Lender pursuant to Section 2.13 of the Credit Agreement.

(e) This Amendment is a "Loan Document" under (and as defined in) the Credit Agreement.

5. Governing Law. This Amendment shall be construed in accordance with and governed by the law of the State of New York.

6. Submission to Jurisdiction. The Borrower hereby irrevocably and unconditionally submits, for itself and its property, to the exclusive jurisdiction of the Supreme Court of the State of New York sitting in New York County and of the United States District Court of the Southern District of New York, and any appellate court from any thereof, in any action or proceeding arising out of or relating to this Amendment, or for recognition or enforcement of any judgment, and each of the parties hereto hereby irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in such New York State court or, to the extent permitted by law, in such Federal court. Each of the parties hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Nothing in this Amendment shall affect any right that the Administrative Agent, any Issuing Bank or any Lender may otherwise have to bring any action or proceeding relating to this Amendment against the Borrower or its properties in the courts of any jurisdiction.

7. Headings. Section headings used in this Amendment are for convenience of reference only, are not part of this Amendment and shall not affect the construction of, or be taken into consideration in interpreting, this Amendment.

8. Counterparts. This Amendment may be executed by one or more of the parties hereto on any number of separate counterparts, and all of said counterparts taken together shall be deemed to constitute one and the same instrument. Delivery of an executed counterpart of a signature page to this Agreement by fax or other electronic transmission (including, without limitation, PDF) shall be effective as delivery of a manually executed counterpart of this Agreement.

[Signature Pages Follow]

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IN WITNESS WHEREOF, this Amendment has been duly executed as of the day and year first above written.

C. R. BARD, INC.,  
as the Borrower

By: /s/ Christopher S. Holland  
Name: Christopher S. Holland  
Title: Senior Vice President and Chief Financial Officer

By: /s/ Scott T. Lowry  
Name: Scott T. Lowry  
Title: Vice President and Treasurer

Signature Page to Amendment No. 4 to  
Credit Agreement dated as of October 12, 2011  
C. R. Bard, Inc.

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JPMORGAN CHASE BANK, N.A.,  
individually as a Lender, as an Issuing Bank, as  
Swingline Lender and as Administrative Agent

By: /s/ Joon Hur  
Name: Joon Hur  
Title: Vice President

Signature Page to Amendment No. 4 to  
Credit Agreement dated as of October 12, 2011  
C. R. Bard, Inc.

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BANK OF AMERICA, N.A.,  
individually as a Lender, as an Issuing Bank and as a  
Syndication Agent

By: /s/ Joseph L. Corah  
Name: Joseph L. Corah  
Title: Director

Signature Page to Amendment No. 4 to  
Credit Agreement dated as of October 12, 2011  
C. R. Bard, Inc.

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U.S. BANK NATIONAL ASSOCIATION,  
individually as a Lender, as an Issuing Bank and as a  
Syndication Agent

By: /s/ Joseph M. Schnorr  
Name: Joseph M. Schnorr  
Title: Senior Vice President

Signature Page to Amendment No. 4 to  
Credit Agreement dated as of October 12, 2011  
C. R. Bard, Inc.

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WELLS FARGO BANK, NATIONAL ASSOCIATION,  
individually as a Lender and as a Documentation Agent

By: /s/ Joe Ellerbroek

Name: Joe Ellerbroek

Title: Vice President

Signature Page to Amendment No. 4 to  
Credit Agreement dated as of October 12, 2011  
C. R. Bard, Inc.

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GOLDMAN SACHS BANK USA,  
individually as a Lender and as a Documentation Agent

By: /s/ Annie Carr  
Name: Annie Carr  
Title: Authorized Signatory

Signature Page to Amendment No. 4 to  
Credit Agreement dated as of October 12, 2011  
C. R. Bard, Inc.



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BARCLAYS BANK PLC,  
individually as a Lender and as a Documentation Agent

By: /s/ May Huang  
Name: May Huang  
Title: Assistant Vice President

Signature Page to Amendment No. 4 to  
Credit Agreement dated as of October 12, 2011  
C. R. Bard, Inc.

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ROYAL BANK OF CANADA,  
individually as a Lender and as a Documentation Agent

By: /s/ Scott MacVicar  
Name: Scott MacVicar  
Title: Authorized Signatory

Signature Page to Amendment No. 4 to  
Credit Agreement dated as of October 12, 2011  
C. R. Bard, Inc.

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TD BANK, N.A.,  
individually as a Lender and as a Documentation Agent

By: /s/ Steve Levi  
Name: Steve Levi  
Title: Senior Vice President

Signature Page to Amendment No. 4 to  
Credit Agreement dated as of October 12, 2011  
C. R. Bard, Inc.

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THE BANK OF TOKYO-MITSUBISHI UFJ, LTD.,  
individually as a Lender and as a Documentation Agent

By: /s/ Brian McNany

Name: Brian McNany

Title: Director

Signature Page to Amendment No. 4 to  
Credit Agreement dated as of October 12, 2011  
C. R. Bard, Inc.

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MIZUHO BANK, LTD.,  
individually as a Lender and as a Documentation Agent

By: /s/ Bertram H. Tang  
Name: Bertram H. Tang  
Title: Authorized Signatory

Signature Page to Amendment No. 4 to  
Credit Agreement dated as of October 12, 2011  
C. R. Bard, Inc.

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BANK OF CHINA, NEW YORK BRANCH  
individually as a Lender and as a Documentation Agent

By: /s/ Raymond Qiao  
Name: Raymond Qiao  
Title: Managing Director

Signature Page to Amendment No. 4 to  
Credit Agreement dated as of October 12, 2011  
C. R. Bard, Inc.

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HSBC BANK USA, NATIONAL ASSOCIATION,  
as a Lender

By: /s/ Robert J Levins

Name: Robert J Levins

Title: Senior Portfolio Manager

Signature Page to Amendment No. 4 to  
Credit Agreement dated as of October 12, 2011  
C. R. Bard, Inc.

Commitments

<u>Name of Lender</u>	<u>Commitment (\$)</u>
JPMorgan Chase Bank, N.A.	\$ 125,000,000
Bank of America, N.A.	\$ 125,000,000
U.S. Bank National Association	\$ 125,000,000
Wells Fargo Bank, National Association	\$ 75,000,000
Goldman Sachs Bank USA	\$ 75,000,000
Barclays Bank PLC	\$ 75,000,000
Royal Bank of Canada	\$ 75,000,000
TD Bank, N.A.	\$ 75,000,000
The Bank of Tokyo-Mitsubishi UFJ, Ltd.	\$ 75,000,000
Mizuho Bank, Ltd.	\$ 75,000,000
Bank of China, New York Branch	\$ 75,000,000
HSBC Bank USA, National Association	\$ 25,000,000
<b>Total:</b>	<b>\$1,000,000,000</b>



**Exhibit 12.1 - Computation of Ratio of Earnings to Fixed Charges**

(dollars in millions)	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
Earnings from operations before taxes	\$663.7	\$349.4	\$445.8	\$1,213.4	\$732.4
Add (Deduct):					
Fixed charges	63.2	52.8	52.9	52.4	46.1
Undistributed earnings of equity investments	—	0.4	0.3	(1.0)	(9.6)
Earnings available for fixed charges	<u>\$726.9</u>	<u>\$402.6</u>	<u>\$499.0</u>	<u>\$1,264.8</u>	<u>\$768.9</u>
Fixed charges:					
Interest, including amounts capitalized <sup>(1)</sup>	\$ 54.5	\$ 44.9	\$ 44.8	\$ 45.0	\$ 39.6
Proportion of rent expense deemed to represent interest factor	8.7	7.9	8.1	7.4	6.5
Fixed charges	<u>\$ 63.2</u>	<u>\$ 52.8</u>	<u>\$ 52.9</u>	<u>\$ 52.4</u>	<u>\$ 46.1</u>
Ratio of earnings to fixed charges	<u>11.50</u>	<u>7.63</u>	<u>9.43</u>	<u>24.14</u>	<u>16.68</u>

(1) Interest related to unrecognized tax benefits is included as income tax expense and not included in fixed charges.

Exhibit 12.1

**Exhibit 21****Subsidiaries of the Registrant**

The following table lists, as of December 31, 2016, the company and its significant subsidiaries and indicates the jurisdiction of organization of each subsidiary:

	<b>Where Incorporated</b>
C. R. Bard, Inc. (Registrant)	New Jersey
Bard Access Systems, Inc.	Utah
Bard Acquisition Sub, Inc.	Delaware
Bard ASDI, Inc.	New Jersey
Bard Australia Pty. Limited	Australia
Bard Benelux N.V.	Belgium
Bard Brachytherapy, Inc.	Delaware
Bard Brasil Industria e Comercio de Produtos Para e Saude Ltda.	Brazil
Bard Brasil-Serviços em Equipamentos Médicos Ltda.	Brazil
Bard Canada Inc.	Canada
Bard Chile S.p.A.	Chile
Bard Colombia S.A.S.	Colombia
Bard Czech Republic s.r.o.	Czech Republic
Bard de España, S.A.	Spain
Bard Devices, Inc.	Delaware
Bard Dublin ITC Limited	Ireland
Bard EMEA Finance Center Sp. z.o.o.	Poland
Bard European Distribution Center N.V.	Belgium
Bard Finance B.V. & KG	Germany
Bard Financial Services Ltd.	England
Bard Finland OY	Finland
Bard France S.A.S.	France
Bard Healthcare Science (Shanghai) Limited	China
Bard Healthcare, Inc.	Texas
Bard Hellas S.A.	Greece
Bard Holding SAS	France
Bard Holdings GmbH & Co KG	Germany
Bard Holdings Limited	England
Bard Holdings Netherlands BV	The Netherlands
Bard Hong Kong Limited	Hong Kong
Bard India Healthcare Pvt. Ltd.	India
Bard International Holdings, BV	The Netherlands
Bard International, Inc.	Delaware
Bard Istanbul Sağlık Hizmetleri Limited Şirketi	Turkey
Bard Korea Limited	Korea
Bard Limited	England
Bard Malaysia Healthcare.Sdn. Bhd.	Malaysia
Bard Medica S.A.	Switzerland
Bard Medical Devices (Beijing) Co., Ltd.	China
Bard Medical R&D (Shanghai) Co. Ltd.	China
Bard Medical S.A. (Proprietary) Limited	South Africa
Bard Mexico Realty, S. de R.L. de C.V.	Mexico
Bard MRL Acquisition Corp.	Delaware
Bard Netherlands CV	The Netherlands
Bard Norden AB	Sweden
Bard Norway AS	Norway
Bard Operations Center S.a.r.l.	Luxembourg
Bard Pacific Health Care Company Ltd.	Taiwan
Bard Peripheral Vascular, Inc.	Arizona
Bard Poland Sp. z.o.o.	Poland
Bard Reynosa S.A. de C.V.	Mexico
Bard S.r.l.	Italy
Bard Sendirian Berhad	Malaysia
Bard Shannon Limited	Ireland
Bard Singapore Private Limited	Singapore

**Exhibit 21****Subsidiaries of the Registrant (continued)**

	<b>Where Incorporated</b>
Bard Sourcing Office Singapore Pte. Ltd.	Singapore
Bard Sweden AB	Sweden
Bard Thailand Limited	Thailand
Bard UK Newco Ltd.	England
Bard Verwaltung GmbH (f/k/a Angiomed GmbH)	Germany
Bridger Biomed, Inc.	Montana
C. R. Bard (Portugal) Produtos e Artigos Medicos e Farmaceuticos, Lda.	Portugal
C. R. Bard GmbH	Germany
C. R. Bard Netherlands Sales BV	The Netherlands
C. R. Bard, LLC	Delaware
Cardial S.A.S.	France
Clearstream Technologies Group Limited	Ireland
Clearstream Technologies Limited	Ireland
Davol Inc.	Delaware
Davol International Limited	England
Davol Surgical Innovations, S.A. de C.V.	Mexico
DVL Acquisition Sub, Inc.	Delaware
Dymax Corporation	Pennsylvania
Embo Medical Ltd.	Ireland
Flowcardia, Inc.	Delaware
Flowcardia, LLC	Delaware
Gamer Lasertechnik GmbH	Germany
Gesco International Inc.	Massachusetts
Gesco International LLC	Massachusetts
Kabushiki Kaisha Medicon (Medicon, Inc.)	Japan
Liberator Health and Education Services, Inc.	Florida
Liberator Health and Wellness, Inc.	Florida
Liberator Medical Holdings, Inc.	Nevada
Liberator Medical Supply, Inc.	Florida
Limited Liability Company Bard Rus	Russia
Loma Vista Medical, Inc.	Delaware
Loma Vista Medical, LLC	Delaware
Lutonix, Inc.	Delaware
Medafor, Inc.	Minnesota
MedChem Products, Inc.	Massachusetts
Medivance, Inc.	Delaware
Navarre Biomedical, LLC	Minnesota
Navarre Biomedical, Ltd.	Minnesota
Neomend, Inc.	Delaware
Now Medical Distribution, Inc.	Delaware
Now Medical Distribution, LLC	Delaware
Productos Bard de Mexico S.A. de C.V.	Mexico
Productos Para el Cuidado de la Salud, S.A. de C.V.	Mexico
ProSeed, Inc.	New Jersey
Roberts Laboratories, Inc.	Arizona
Rochester Medical Corporation	Minnesota
Rochester Medical Ltd.	England
SenoRx, Inc.	Delaware
SenoRx, LLC	Delaware
Specialized Health Products International, Inc.	Delaware
Specialized Health Products International, LLC	Delaware
Specialized Health Products, Inc.	Utah
Tri-County Medical & Ostomy Supplies, Inc.	Tennessee
Vas-Cath, Inc.	Canada
Vascular Pathways Europe Limited	England
Venetec International, Inc.	Delaware
Venetec International, LLC	Delaware
Y-Med, Inc.	Delaware
Y-Med, LLC	Delaware

Consent of Independent Registered Public Accounting Firm

The Board of Directors of  
C. R. Bard, Inc.:

We consent to the incorporation by reference in the registration statements (Nos. 333-197914, 333-189705, 333-182239, 333-86668, 333-59156, 333-55684, 333-78089, 333-51793, 333-69857, 333-30217, 333-07189, 33-63147, 33-35544, 33-64874, 333-104683, 333-135098, 333-151740, 333-159928, 333-167576 and 333-205849) on Form S-8 and (No. 333-210992) on Form S-3 of C. R. Bard, Inc. and subsidiaries of our reports dated February 13, 2017, with respect to the consolidated balance sheets of C. R. Bard, Inc. and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, shareholders' investment, and cash flows for each of the years in the three-year period ended December 31, 2016, and the related consolidated financial statement schedule and the effectiveness of internal control over financial reporting as of December 31, 2016 which reports appear in the December 31, 2016 annual report on Form 10-K of C. R. Bard, Inc.

Our report includes an explanatory paragraph indicating that management excluded from its assessment of the effectiveness of the company's internal control over financial reporting as of December 31, 2016, internal control over financial reporting associated with Liberator Medical Holdings, Inc., representing approximately 2.1% of C. R. Bard, Inc.'s consolidated net sales for the year ended December 31, 2016 and assets associated with Liberator Medical Holdings, Inc.'s operations representing 0.4% of C. R. Bard, Inc.'s consolidated total assets as of December 31, 2016. Our audit of internal control over financial reporting also excluded an evaluation of the internal control over financial reporting of Liberator Medical Holdings, Inc.

/s/ KPMG LLP  
Short Hills, New Jersey  
February 13, 2017

**EXHIBIT 31.1**  
**Certification of Chief Executive Officer**

I, Timothy M. Ring, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2016 of C. R. Bard, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
  - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 13, 2017

/s/ Timothy M. Ring

Timothy M. Ring  
Chief Executive Officer

**EXHIBIT 31.2**  
**Certification of Chief Financial Officer**

I, Christopher S. Holland, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2016 of C. R. Bard, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
  - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 13, 2017

/s/ Christopher S. Holland  
Christopher S. Holland  
Senior Vice President and Chief Financial Officer

**EXHIBIT 32.1**

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO SECTION 906 OF THE  
SARBANES-OXLEY ACT OF 2002**

In connection with the annual report of C. R. Bard, Inc. on Form 10-K for the year ended December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Timothy M. Ring, Chairman and Chief Executive Officer of C. R. Bard, Inc., certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of C. R. Bard, Inc.

/s/ Timothy M. Ring

Name: Timothy M. Ring

Date: February 13, 2017

**EXHIBIT 32.2**

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO SECTION 906 OF THE  
SARBANES-OXLEY ACT OF 2002**

In connection with the annual report of C. R. Bard, Inc. on Form 10-K for the year ended December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Christopher S. Holland, Senior Vice President and Chief Financial Officer of C. R. Bard, Inc., certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of C. R. Bard, Inc.

/s/ Christopher S. Holland

Name: Christopher S. Holland

Date: February 13, 2017



**C. R. Bard, Inc.**

**730 Central Avenue  
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