VARIAN MEDICAL SYSTEMS INC
Form 10-K
November 23, 2016

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K
ýANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended September 30, 2016
OR
..TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission File Number: 1-7598
VARIAN MEDICAL SYSTEMS, INC.
(Exact name of Registrant as specified in its charter)

Delaware	94-2359345
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
3100 Hansen Way, Palo Alto, California	94304-1038
(Address of principal executive offices)	(Zip Code)

(650) 493-4000
(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, $1 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 ý 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 ý
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 ý No ¨
Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ý 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 ý
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. (Check one):

Large accelerated filer x	Accelerated filer o
Non-accelerated filer o	Smaller reporting company o

(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 Exchange Act). Yes ¨ No ý

As of April 1, 2016, the last business day of Registrant's most recently completed second fiscal quarter, the aggregate market value of shares of Registrant's common stock held by non-affiliates of Registrant (based upon the closing sale price of such shares on the New York Stock Exchange on April 1, 2016) was $7,731,668,012. Shares of Registrant's common stock held by the Registrant's executive officers and directors and by each entity that owned 10% or more of Registrant's outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

At November 11, 2016, the number of shares of the Registrant's common stock outstanding was 93,410,047.

DOCUMENTS INCORPORATED BY REFERENCE

Definitive Proxy Statement for the Company's 2017 Annual Meeting of Stockholders—Part III of this Form 10 K

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FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (this "Annual Report"), including the Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A"), contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, which provides a "safe harbor" for statements about future events, products and future financial performance that are based on the beliefs of, estimates made by and information currently available to the management of Varian Medical Systems, Inc. ("VMS") and its subsidiaries (collectively "we," "our," "Varian" or the "Company"). The outcome of the events described in these forward-looking statements is subject to risks and uncertainties. Actual results and the outcome or timing of certain events may differ significantly from those projected in these forward-looking statements due to the factors listed under Item 1A, "Risk Factors," and from time to time in our other filings with the Securities and Exchange Commission ("SEC"). For this purpose, statements concerning: industry or market segment outlook; market acceptance of or transition to new products or technology such as fixed field intensity-modulated radiation therapy, image-guided radiation therapy, stereotactic radiosurgery, volumetric modulated arc therapy, brachytherapy, software, treatment techniques, proton therapy and advanced X-ray tube and flat panel products; growth drivers; future orders, revenues, backlog, earnings or other financial results; timing of the proposed spin-off of our Imaging Components business; and any statements using the terms "believe," "expect," "anticipate," "can," "should," "would," "could," "estimate," "may," "intended," "potential," and "possible" or simila forward-looking statements that involve risks and uncertainties that could cause our actual results and the outcome and timing of certain events to differ materially from those projected or management's current expectations. By making forward-looking statements, we have not assumed any obligation to, and you should not expect us to, update or revise those statements because of new information, future events or otherwise.

PART I

Item 1. Business

Overview

We, Varian Medical Systems, Inc., are a Delaware corporation originally incorporated in 1948 as Varian Associates, Inc. We are the world's leading manufacturer of medical devices and software for treating cancer and other medical conditions with radiotherapy, radiosurgery, proton therapy and brachytherapy. We are also a premier supplier of X-ray imaging components for medical, scientific, cargo screening, and industrial applications. Our mission is to explore and develop radiation technology that helps to protect and save lives and prevent harm. We seek to be a "Partner for Life" and to help save millions of lives every year everywhere. To meet this challenge, we offer tools for fighting cancer, taking X-ray images and protecting ports and borders.

Our operations are currently grouped into two reportable operating segments: Oncology Systems and Imaging Components. Our Ginzton Technology Center ("GTC") and Varian Particle Therapy ("VPT") business are reflected in the "Other" category, because these operating segments do not meet the criteria of a reportable operating segment. The operating segments were determined based on how our Chief Executive Officer, who is our Chief Operating Decision Maker ("CODM"), views and evaluates our operations. The CODM allocates resources to and evaluates the financial performance of each operating segment primarily based on operating earnings.

On May 23, 2016, we announced our intention to separate our Imaging Components business from the remainder of our business through a pro rata distribution of the common stock of a new company named Varex Imaging Corporation ("Varex"). The separation is subject to numerous conditions, including final approval by our Board of Directors. Please see the information in Item 1A, "Risk Factors," which describes some of the risks and uncertainties associated with the proposed separation. For a further discussion of the planned separation, see Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Oncology Systems. Our largest business segment is Oncology Systems, which designs, manufactures, sells and services hardware and software products for treating cancer with conventional radiotherapy, and advanced treatments such as fixed field intensity-modulated radiation therapy ("IMRT"), image-guided radiation therapy ("IGRT"), volumetric modulated arc therapy ("VMAT"), stereotactic radiosurgery ("SRS"), stereotactic body radiotherapy ("SBRT") and brachytherapy. Our software solutions also include informatics software for information management, clinical

knowledge exchange, patient care management, practice management and decision-making support for comprehensive cancer clinics, radiotherapy centers and medical oncology practices.

Our hardware products include linear accelerators, brachytherapy afterloaders, treatment simulation and verification equipment and accessories; and our software products include information management, treatment planning, image processing, clinical knowledge exchange, patient care management, decision-making support and practice management software. Our products

enable radiation oncology departments in hospitals and clinics to perform conventional radiotherapy and brachytherapy treatments and offer advanced treatments such as IMRT, IGRT, VMAT, SRS and SBRT. Our products are also used by surgeons and radiation oncologists to perform radiosurgery. Furthermore, our software products help improve physician engagement and clinical knowledge-sharing, patient care management and management of cancer clinics, radiotherapy centers and oncology practices for better performance. Our worldwide customers include university research and community hospitals, private and governmental institutions, healthcare agencies, physicians' offices, oncology practices, radiotherapy centers and cancer care clinics.

Imaging Components. Our Imaging Components business segment designs, manufactures, sells and services X-ray imaging components for use in a range of applications, including radiographic or fluoroscopic imaging, mammography, special procedures, computed tomography, computer-aided diagnostics, and industrial applications. We provide a broad range of X-ray imaging components including X-ray tubes, flat panel digital image detectors, high voltage connectors, image processing software and workstations, computer-aided diagnostic software, collimators and automatic exposure control devices. We sell our X-ray imaging components to imaging system original equipment manufacturer ("OEM") customers that incorporate them into their medical diagnostic, dental, veterinary and industrial imaging systems, to independent service companies and directly to end-users for replacement purposes. Our Imaging Components business segment also designs, manufactures, sells and services security and inspection products, which include Linatron® X-ray accelerators, imaging processing software and image detection products for security and inspection purposes, such as cargo screening at ports and borders and nondestructive examination in a variety of applications. We generally sell security and inspection products to OEM customers who incorporate our products into their inspection systems.

Other. The "Other" category is comprised of VPT and the operations of the GTC.

Our VPT business develops, designs, manufactures, sells and services products and systems for delivering proton therapy, another form of external beam radiotherapy using proton beams, for the treatment of cancer. Although proton therapy has been in clinical use for more than four decades, it has not been widely deployed due to high capital cost. Our current focus is bringing our expertise in traditional radiation therapy to proton therapy to improve its clinical utility and to reduce its cost of treatment per patient, so that it is more widely accepted and deployed.

GTC, our scientific research facility, develops technologies for our current businesses or which may lead to new business areas, including technology to improve radiation therapy and X-ray imaging, as well as other technology for a variety of applications such as chemical or biological agents that work synergistically with radiation to improve treatment outcomes. Subsequent to fiscal year 2016, GTC was absorbed primarily into our Oncology Systems and Imaging Components businesses and is no longer a separate business.

The Americas region includes North America (primarily United States and Canada) and Latin America. The EMEA region includes Europe, Russia, the Middle East, India and Africa. The APAC region primarily includes East and Southeast Asia and Australia.

Our business is subject to various risks and uncertainties. You should carefully consider the factors described in Item 1A,"Risk Factors" in conjunction with the description of our business set forth below and the other information included in this Annual Report on Form 10-K.

Radiation Therapy and the Cancer Care Market

Radiotherapy is the use of certain types of focused energy to kill cancer cells and shrink tumors. Radiotherapy is commonly used either alone or in combination with surgery, chemotherapy or targeted drugs. One important advantage is that radiation has its greatest effect on replicating cells. When radiation interacts with a cell the therapeutic effect is primarily mediated by damaging cellular genetic material (chromosomes), which interrupts cell replication and results in eventual cellular death. Since the need for replication is particularly critical to the survival of a cancer and since normal tissues are better able to repair such damage, radiation tends to disproportionately kill cancer cells. The clinical goal in radiation oncology is to deliver the highest possible radiation dose directly to the tumor to kill the cancerous cells while minimizing radiation exposure to healthy tissue surrounding the tumor to limit or avoid complications, side effects and secondary effects caused by the treatment. This goal has been the driving force in the clinical care advancements in radiation oncology over the past two decades, from conventional radiotherapy to advanced forms of treatment such as IMRT, IGRT, VMAT, SRS, SBRT and proton therapy, and it has

certainly been one of the driving forces in our own product development plans.

The process for delivering radiotherapy typically consists of examining the patient, planning the treatment, simulating and verifying the treatment plan, providing quality assurance for the equipment and software, delivering the treatment, verifying

that the treatment was delivered correctly and recording the history and results of the treatment. The team responsible for delivering the radiotherapy treatment generally is comprised of a physician specializing in radiation oncology, a medical physicist or dosimetrist for planning patient treatments, a medical physicist for conducting appropriate quality assurance procedures and a radiation therapist for positioning the patients for treatment and operating the machines.
The most common form of radiotherapy involves delivering X-ray beams from outside of the patient's body, a process sometimes referred to as external beam radiotherapy. A device called a medical linear accelerator generates the high-energy X-ray beams and delivers the radiation to the patient lying on a treatment couch. The radiation source rotates around a patient delivering the radiation beam that is shaped to the tumor from different angles. This concentrates radiation at the tumor while at the same time minimizing the dose delivered to the surrounding healthy tissue. Conventional radiotherapy typically involves multiple, or fractionated, treatments of a tumor in up to 50 treatment sessions. The linear accelerator may also deliver electron beams for the treatment of diseases closer to the body surface.
IMRT is an advanced form of external beam radiotherapy in which the shape and intensity of the radiation beams are varied optimally (modulated) across the target region. IMRT allows the radiation dose to be more precisely conformed to the volume of the tumor, allowing physicians to deliver higher doses of radiation to the tumor than conventional radiation treatments, while limiting radiation dose to nearby healthy tissue. In this way, clinicians can design and administer an individualized treatment plan for each patient, targeting the tumor within millimeters. IMRT can be used to treat head and neck, breast, prostate, pancreatic, lung, liver, gynecological and central nervous system cancers. IMRT has become a well-accepted standard of treatment for cancer, and every year additional treatment centers, from university hospitals to local community clinics, adopt IMRT for their treatments. We are a leading global provider of products that enable IMRT for the treatment of cancer.
VMAT is a significant further advancement in IMRT that allows physicians to control three parameters simultaneously: (i) the rate at which the linear accelerator gantry rotates around the patient, (ii) the beam-shaping aperture and (iii) the rate at which the radiation dose is delivered to the patient. This creates a finely-shaped IMRT dose distribution that more closely matches the size and shape of the tumor, with faster treatment times. Our RapidArc® radiotherapy products plan and deliver VMAT treatments.
Physicians, hospitals and clinics place additional value on radiotherapy equipment and treatments, such as VMAT, that enable shorter treatment times and greater patient throughput. From the patient's standpoint, shorter treatment times means that the patient is immobilized on the treatment couch for a shorter time period. Shorter treatment sessions decrease waiting times and, since treatments are delivered in fractions over the course of many days, can mean fewer disruptions to a patient's daily routine. From the physicians' and hospitals' standpoint, shorter treatment times can lessen the chance of tumors moving during treatment and can increase patient throughput. Shorter treatment times and increased patient throughput can increase the number of treatments per day (which is a particular concern in countries with lower numbers of treatment machines per capita), and, as a result, can decrease the cost per treatment which in turn can mean greater access to advanced care for more patients.
IGRT is another advanced form of external beam radiotherapy complementing IMRT to enhance treatments. While IMRT helps physicians more precisely conform the beam to the tumor, IGRT allows physicians to see how a tumor moves or shrinks during a course of treatment, thereby improving treatment accuracy. This allows clinicians to tighten the margin of certainty around the tumor and spare more of the surrounding healthy tissue, potentially improving outcomes. We believe IGRT has become an accepted standard for treatment in the radiation oncology community.
SRS and SBRT, often collectively referred to as radiosurgery, are advanced ablative radiation treatment procedures performed in a small number of treatment sessions with high doses of radiation. Radiosurgery typically incorporates image-guidance to focus many small beams of radiation from many orientations precisely on the target and to minimize dose to surrounding normal tissues. Radiation oncologists, surgeons and other oncology specialists increasingly recognize radiosurgery as a useful tool to treat cancerous and non-cancerous lesions anywhere in the body.
An alternative to external beam radiotherapy, brachytherapy involves the insertion of radioactive seeds, wires or ribbons directly into a tumor or body cavity near the tumor. These techniques tend to irradiate much less of the surrounding healthy tissue so that physicians can prescribe a higher total dose of radiation, typically over a shorter

period of time. Brachytherapy is often used for cancers of the head and neck, breast, uterus, cervix, soft tissue and prostate.

Proton therapy is another form of external beam radiotherapy that uses proton particles in the form of a beam generated with a cyclotron rather than X-ray beams from a linear accelerator. A proton beam's signature energy distribution curve, also known as the "Bragg peak," allows for greater precision in targeting tumor cells with an even lower dose to nearby healthy tissue than may be delivered with X-ray beams from a linear accelerator. This makes proton therapy a preferred option for treating certain cancers, particularly cancers in children and tumors near critical structures such as the optic nerve. Pencil-beam scanning

capability, which is an advanced way of delivering the proton beam, allows for greater sparing of healthy tissue compared to fan-beam scanning of the proton beam and external beam radiotherapy treatments. Although proton therapy has been in clinical use for more than four decades, it has not been widely deployed due to its high capital cost and the market is still developing. We believe we can apply our experience in traditional radiotherapy to proton therapy, reducing the cost of treatment per patient for existing clinical applications and expanding the use of proton therapy into a broader array of cancer types. We believe that proton therapy will over time become a more widely accepted method of treatment.

The radiation oncology market is growing globally due to a number of factors. Worldwide, the number of new cancer cases diagnosed annually is projected to increase from approximately 14 million in 2012 to almost 25 million by 2030, according to the September 2015 Lancet Oncology report compiled by the Global Task Force on Radiotherapy for Cancer Control. In addition, technological advancements have helped to improve the precision and applicability of radiotherapy and radiosurgery, potentially expanding the use of radiotherapy and radiosurgery equipment to treat a broader range of cases. Technological advances in hardware and software are also creating a market for replacing an aging installed base of machines that are unable to deliver new, higher standards of care.

The rise in cancer cases, together with the increase in sophistication of new treatment protocols, have created demand for more automated products that can be integrated into clinically practical systems to make treatments more rapid and cost effective. Technology advances leading to improvements in patient care, the availability of more advanced, automated and efficient clinical tools in radiation therapy, the advent of more precise forms of radiotherapy treatment (such as IMRT, IGRT, VMAT, SRS, SBRT, brachytherapy and proton therapy), and developing technology and equipment (such as EDGE™ and TrueBeam™) that enable treatments that reduce treatment times and increase patient throughput should drive the demand for our radiation therapy products and services.

International markets in particular are under-equipped to address the growing cancer incidence. Patients in many foreign countries must frequently endure long waits for radiotherapy. According to a peer-reviewed publication in the International Journal of Radiation Oncology Biology and Physics in 2014, radiotherapy is required in more than half of new cancer patients, particularly in low- and middle-income countries, and it is estimated that greater than 9,000 additional treatment machines will be required by 2020 in these countries alone. For example, China, India and Brazil are estimated to require over 3,800, 1,200 and 400 additional machines, respectively. This demand in emerging markets, coupled with ever increasing incidences of cancer, represent additional drivers for our continued growth in international markets.

Products

Oncology Systems

Our Oncology Systems business segment is the leading provider of advanced hardware and software products for treatment of cancer with conventional radiation therapy, and advanced treatments such as IMRT, IGRT, VMAT, SRS, SBRT and brachytherapy. Oncology Systems products address each major aspect of the radiotherapy process, including linear accelerators and accessory products for positioning the patient and delivering the X-ray beam; brachytherapy afterloaders for delivering radioactive implantable seeds; treatment planning software for planning treatment sessions and dose delivery; treatment simulation and verification equipment and quality assurance software for simulating and verifying treatment plans before treatment as well as verification of correct treatment delivery; and information management software for recording the history and results of treatments and other patient treatment information and data, including patient images. This business's other software products help improve physician engagement and clinical knowledge-sharing, patient care management and management of cancer clinics, radiotherapy centers and oncology practices for better performance.

The focus of our Oncology Systems business is addressing the key concerns of the market for advanced cancer care systems; improving efficiency, precision, cost-effectiveness and ease of delivery of these treatments; and providing greater access to advanced treatments. A core element of our business strategy is to provide our customers with highly versatile, proven products that are interoperable and can be configured and integrated into automated systems that combine greater precision, shorter treatment times and greater cost effectiveness and that improve the entire process of treating a patient. Our products and accessories for IMRT and IGRT allow clinicians to track and treat tumors using very precisely shaped beams, targeting the tumor as closely as currently possible and allowing the delivery of higher

doses to the tumor while limiting exposure of nearby healthy tissue. Additionally, the precision and versatility of our products and technology make it possible to use radiotherapy to treat metastatic cancers. With our treatment planning, verification and information management software products, a patient's treatment plans, treatment data and images are recorded and stored in a single database shared by each of our products, which enables better communication among products. Our products also allow multiple medical specialties - radiation oncology, neurosurgery, radiographic imaging and medical oncology, as well as clinicians in multiple locations - to share equipment, resources and information in a more efficient, cost-effective manner. Furthermore, the ability of our products and technology to

interoperate with each other and to interconnect into automated systems allows physicians to schedule and treat more patients within a set time period, which adds to the cost-effectiveness of our equipment.

Medical linear accelerators are the core device for delivering conventional external beam radiotherapy, IMRT, IGRT, VMAT, SRS and SBRT, and we produce versions of these devices to suit various clinical requirements. Our UNIQUE™ medical linear accelerator is a low-energy linear accelerator for the more price sensitive emerging markets, designed to meet the evolving needs of our IMRT and IGRT customers in these markets. The Clinac® iX linear accelerators deliver high-energy X-ray beams and are designed for more streamlined and advanced treatment processes, including IMRT and IGRT. We also produce the Trilogy™ linear accelerator, designed to be a versatile, cost-effective, precise high-energy device with a faster dose delivery rate and more precise isocenter compared to the Clinac iX. At the high end, the TrueBeam and EDGE systems for image-guided radiotherapy and radiosurgery are fully-integrated high-energy systems designed from the ground up to treat a moving target with higher speed and accuracy and complement our accelerator product line portfolio.

Our Millennium™ series of multi-leaf collimators and High Definition 120 (“HD 120”) multi-leaf collimators are used with a linear accelerator to define the size, shape and intensity of the generated beams. PortalVision™, our electronic portal-imager, is used to verify a patient’s position while on the treatment couch, which is critical for accurate treatments and simplifies quality assurance of individual treatment plans. We also offer an innovative real-time patient position monitoring product, the RPM™ respiratory gating system, which allows the linear accelerator to be synchronized with patient breathing to help compensate for tumor motion during treatment. In addition, we manufacture the Calypso® system (some features not approved for use in all markets), which can continuously track and monitor the position of implanted and surface Beacon® transponders. This technology allows the treatment beam to be precisely aimed to deliver the full, prescribed dose to the tumor, and minimize exposure of surrounding healthy tissues.

We also offer the EDGE radiosurgery suite, a combination of products for performing advanced radiosurgery using new real-time tumor tracking technology and motion management capabilities. The EDGE radiosurgery suite includes the EDGE radiosurgery accelerator and the Calypso System with Dynamic Edge™ Gating, and the PerfectPitch™ Couch with six degrees of freedom to accurately and precisely align the patient position. Our IGRT accessories include the On-Board Imager® (“OBI”) hardware accessory affixed to the linear accelerator that allows dynamic, real-time imaging of tumors while the patient is on the treatment couch and offers cone-beam computerized tomography (“CBCT”) imaging software capability to allow patient positioning based on soft-tissue anatomy. Using sophisticated image analysis tools, the CBCT scan can be compared with a reference CT scan taken previously to determine how the treatment couch should be adjusted to fine-tune and verify the patient’s treatment setup and positioning prior to delivery of the radiation. To deliver the most advanced forms of IGRT, our accelerators would typically have an OBI, CBCT, PortalVision and other IGRT-related hardware and software as accessories.

Our RapidArc radiotherapy products are a proprietary implementation of VMAT that coordinates beam shaping, dose rate and gantry speed to deliver a highly conformal dose distribution to the target tumor. RapidArc products enable the planning and delivery of image-guided IMRT in a single continuous rotation of up to 360 degrees rather than as a series of fixed fields. Our RapidArc products enable faster delivery of radiation treatment with the possibility of reduced opportunity for tumor movement during treatment, as well as greater patient throughput and lower cost per patient for the hospital or clinic. We believe RapidArc represents a significant advancement in IMRT cancer treatment.

At the end of fiscal year 2016, we launched the HyperArc™ High-Definition Radiotherapy product, which is designed to simplify, automate and improve the quality of intracranial SRS, making SRS accessible to more clinics and patients around the world. HyperArc is pending 510(k) clearance for sale in the United States. We expect that HyperArc will significantly improve the efficiency of sophisticated SRS procedures. HyperArc will be available only on the TrueBeam and Edge platforms.

Our software products enhance and enable the delivery of advanced radiotherapy treatments, from the initial treatment planning and plan quality assurance verification to the post-treatment recording of data and storing of patient information, as well as help improve physician engagement and clinical knowledge-sharing, patient care management and management of cancer clinics, radiotherapy centers and oncology practices for better performance. Prior to any

treatment, physicians must prescribe, or plan, the course of radiation delivery for the patient. We offer a range of treatment planning products that assist physicians in designing this plan. Our Eclipse™ treatment planning system provides physicians with 3D image viewing, treatment simulation, radiation dosage calculation and verification and other tools for generating treatment delivery plans for the patient. The Eclipse software utilizes a sophisticated technique known as inverse planning to enable physicians to rapidly develop optimal treatment plans based on a desired radiation dose outcome to the tumor and surrounding tissue. Clinics may use plan models included with Eclipse or can create models based on their own treatment methods and protocols. Our RapidPlan™ Knowledge-based Planning tool creates a new category for treatment planning systems in which statistical models can be used to predict the achievable quality of an IMRT treatment from a patient's anatomy. RapidPlan is designed to streamline the planning process by using shared clinical knowledge embedded in its statistical plan models. Our Insightive™ analytics

solution aggregates clinical and operational data and allows for improved decision making and practice management. Insightive enables oncology administrators and clinicians to use real-time information to discover patterns and trends through interactive dashboards and visualizations. During fiscal year 2016, we also created an interactive online group on the OncoPeer™ platform for clinicians to share knowledge-based RapidPlan cancer treatment models that can improve the efficiency and quality of treatment models and cancer care across multiple institutions. The OncoPeer cloud community is a platform where oncologists, clinicians and other oncology professionals can publish knowledge, share data, exchange treatment techniques and discuss best practices within a professional oncology network.

Our treatment planning products include Varian Treatment™, which connects ARIA® Oncology Information Management System ("ARIA") to third party linear accelerators and expands our software support of third party manufacturers. We continue to enhance our treatment planning products and work to integrate multi-criteria optimization radiotherapy treatment planning algorithms licensed from the Fraunhofer Institute which enable clinicians to quickly navigate solution space to find the ideal treatment plan for each patient. We aim to incorporate this technology along with other treatment planning software tools to enhance both treatment planning efficiency and quality.

Our ARIA information system is a comprehensive real-time information management system and database that records and verifies radiotherapy treatments carried out on the linear accelerator, records and stores patient data relating to chemotherapy treatment which may be prescribed by a physician in addition to radiotherapy, performs patient charting and manages patient information and patient image data. This gives clinics and hospitals the ability to manage treatment and patient information across radiation oncology and medical oncology procedures. Also, because ARIA is an electronic medical record, it can enable users to operate filmless and paperless oncology departments and cancer clinics. ARIA is ARRA-HITECH Stage II certified and supports the ICD-10 billing codes. Our FullScale™ oncology-specific information technology solutions take advantage of virtualization or cloud technologies to deploy our ARIA oncology information and Eclipse treatment planning systems in a way that enables treatment centers to take advantage of economies of scale. We have from time to time entered into agreements with a variety of companies to increase the capabilities of our ARIA Information Systems software. Most notable among these were agreements with Infor, pursuant to which it will provide a health data exchange solution to replace our proprietary Information Exchange Manager; and Tableau Software, pursuant to which it will provide an advanced data exploration and visualization platform.

Our Velocity™ software provides solutions at the clinical process level to aggregate unstructured treatment and imaging data from diverse systems. It allows for a more comprehensive view of a patient's diagnostic imaging and treatment history and helps clinicians make more informed treatment decisions.

Qumulate™ is our cloud-based software technology that collects and analyzes machine performance data in a radiation therapy department and allows users to compare their machine performance data and trends against a community of users' data.

During fiscal year 2016, we introduced 360 Oncology™, a first-of-its-kind software tool that enables tumor boards to more effectively coordinate patient care among the numerous specialists involved in cancer treatment. With Varian 360 Oncology care management, a clinic's data, records and patient information are connected through a single platform, enabling the entire cancer-fighting team to coordinate care.

Our treatment simulators enable physicians to simulate radiation therapy treatments prior to delivery. We manufacture and sell Acuity™, a simulator that uses advanced amorphous silicon imaging technology and which has been designed to enhance IMRT treatments by integrating simulation more closely with treatment planning and by helping physicians better address tumor motion caused by breathing.

In addition to offering our own suite of equipment and software products for planning and delivering radiotherapy treatments, we have partnered with selected leaders in certain segments of the radiation therapy and radiosurgery market. In October 2016, we established a three-year strategic agreement with McKesson to supply its US Oncology Network and Vantage Oncology affiliated sites of care with treatment delivery systems and planning, service and radiotherapy information system solutions. Under the agreement we will collaborate with McKesson to establish interoperability between our Aria product and McKesson IT solutions which we anticipate will facilitate access to McKesson's networks for future conversion to Aria, Eclipse and Velocity at sites that do not currently utilize these

solutions. We have a strategic global partnership with Siemens AG (“Siemens”) through which, among other things, we represent Siemens diagnostic imaging products to radiation oncology clinics in most global markets, and Siemens, in turn, represents our equipment and software products for radiotherapy and radiosurgery to its healthcare customers in agreed upon countries. Furthermore, we and Siemens have developed interfaces to enable ARIA and Eclipse to connect with Siemens linear accelerators and imaging systems, and are exploring opportunities to co-develop new imaging and treatment solutions. We hold a minority equity interest in Augmenix, Inc. (“Augmenix”), a company that is developing hydrogel products to decrease irradiation of radiation sensitive tissue such as the rectum.

Our brachytherapy operations design, manufacture, sell and service advanced brachytherapy products, including VariSource™ HDR afterloaders and GammaMed™ HDR/PDR afterloaders, BrachyVision™ brachytherapy treatment planning system, applicators and accessories. Brachytherapy also develops and markets the VariSeed™ LDR prostate treatment planning system and the Vitesse™ software for real-time treatment planning for HDR prostate brachytherapy. Revenues from our Oncology Systems business segment represented 76%, 76% and 77% of total revenues for fiscal years 2016, 2015 and 2014, respectively. Our Oncology Systems business segment revenues include both product and service revenues. Product revenues in Oncology Systems accounted for 44%, 44% and 46% of total revenues for fiscal years 2016, 2015 and 2014, respectively. Service revenues in Oncology Systems accounted for 32%, 32% and 31% of total revenues for fiscal years 2016, 2015 and 2014, respectively. See further discussion in “Customer Services and Support.” For a discussion of Oncology Systems business segment financial information, see Note 17, "Segment Information" of the Notes to the Consolidated Financial Statements.

Imaging Components

Our Imaging Components business segment is a world leader in designing and manufacturing X-ray tubes, flat panel detectors, imaging software, and high voltage connectors, which are key components of X-ray imaging systems. We sell our products to OEM customers both for incorporation into new system configurations and as replacement components for installed systems. We conduct an active research and development program to focus on new technology and applications in both the medical and industrial X-ray imaging markets.

We manufacture X-ray tubes for four primary medical diagnostic radiology applications: CT scanners, radiographic or fluoroscopic imaging, special procedures, and mammography. We also offer a large line of industrial X-ray tubes, which consist of analytical X-ray tubes used for X-ray fluorescence and diffraction, as well as tubes used for non-destructive imaging and gauging and airport baggage inspection systems.

Our flat panel detectors, which are based on amorphous silicon imaging technologies, have broad application as an alternative to image intensifier tubes and X-ray film. Our flat panel detector products are being incorporated into next generation filmless medical diagnostic, dental, veterinary, and industrial inspection imaging systems and also serve as a key component of our OBI, which helps enable IGRT. We believe that imaging equipment based on amorphous silicon technologies is more stable and reliable, needs fewer adjustments, suffers less degradation over time than image intensifier tubes, and is more cost effective than X-ray film.

We also offer image processing tools for X-ray imaging systems for a variety of modalities including fluoroscopy, angiography, cardiology, mammography and general radiography. The image processing tools may be combined with our radiographic flat panel detectors to upgrade film-based X-ray imaging systems to digital systems.

We are currently in the process of introducing multiple new products which we believe will help promote the growth of our Imaging Components business. Through our acquisitions completed in fiscal year 2015, we broadened our portfolio of components by adding high voltage connectors, automatic exposure control devices and image processing software for computer-aided diagnosis. Changes in access to diagnostic radiology or the reimbursement rates associated with diagnostic radiology as a result of the Patient Protection and Affordable Care Act (the “Affordable Care Act”) in the United States and similar state proposals, or otherwise, could however affect demand for our products in our Imaging Components business.

Our Imaging Components business also designs, manufactures, sells and services Linatron X-ray accelerators, imaging processing software and image detection products for security and inspection purposes, such as cargo screening at ports and borders and nondestructive examination in a variety of applications. The Linatron Mi6 is a dual energy accelerator that can perform non-intrusive inspection of cargo containers and aid in automatically detecting and alerting operators when high-density nuclear materials associated with dirty bombs or weapons of mass destruction are present during cargo screening. The Linatron K-15 is a high-energy accelerator for inspection of very large, dense objects, including, for example, manufactured segments used in the Ariane rocket program in Europe and National Aeronautics and Space Administration rocket programs in the U.S.

Generally, we sell our security and inspection products to OEM customers who incorporate our products into OEM inspection systems. The OEM customers sell the systems to customs and other government agencies for use in overseas ports and borders to screen overland, rail, and sea cargo for contraband, weapons, narcotics and explosives, as well as for manifest verification. We also sell our security and inspection products to commercial enterprises in the

casting, power, aerospace, chemical, petro-chemical and automotive industries for nondestructive product examination purposes, such as industrial inspection and manufacturing quality control.

Our security and inspection products are complemented by our Attila software that enables us to provide comprehensive radiation solutions for customers that integrate our high-energy X-ray technology into systems for cargo screening, industrial inspection and non-destructive testing. This software can benefit our customers in the design and verification of systems where radiation effects play a critical role in product performance, safety, or reliability.

Revenues from our Imaging Components business segment represented 19%, 20% and 22% of total revenues for fiscal years 2016, 2015 and 2014, respectively. For a discussion of the Imaging Components business segment financial information, see Note 17, "Segment Information" of the Notes to the Consolidated Financial Statements.

Other

Our VPT business develops, designs, manufactures, sells and services products and systems for delivering proton therapy, another form of external beam therapy using proton beams, for the treatment of cancer. Our ProBeam® system is capable of delivering precise intensity modulated proton therapy (“IMPT”) using pencil beam scanning technology. During fiscal year 2016, we booked our first ProBeam Compact order. ProBeam Compact is our lower cost, single room proton therapy product launched in fiscal year 2014. Proton therapy is a preferred option for treating certain cancers, particularly tumors near critical structures such as the optic nerve and cancers in children. Although proton therapy has been in clinical use for more than four decades, it has not been widely deployed due to high capital cost. Proton therapy facilities are large-scale construction projects that are time consuming, involve significant customer investment and often complex project financing.

Our VPT technology and systems are in operation at the Paul Scherrer Institute in Villigen, Switzerland, the Rinecker Proton Therapy Center in Munich, Germany, the Scripps Proton Therapy Center in San Diego, California, the Maryland Proton Therapy Center ("MPTC") in Baltimore, Maryland and the Proton Therapy Center at Cincinnati Children's Hospital in Liberty Township, Ohio.

During fiscal years 2016, 2015 and 2014, we recorded two, six, and three VPT proton therapy product orders, respectively.

For certain proton therapy project orders, we may elect to provide a portion of the financing for the project, such as: In July 2015, we, through one of our subsidiaries, committed to loan up to $91.5 million to MM Proton I, LLC in connection with a purchase agreement to supply a proton system to equip the New York Proton Center, including commitments to extend senior first lien loans and subordinated third lien loans. In June 2016, we assigned to Deutsche Bank AG ("Deutsche Bank") our entire $73.0 million senior first lien loan commitment. As of September 30, 2016, we have loaned $18.5 million under the subordinated third lien loan.

In May 2015, we, through one of our subsidiaries, committed to loan up to $35.0 million to MPTC. As of September 30, 2016 we had loaned an aggregate of $23.6 million to MPTC and in October 2016 loaned the remaining $11.4 million of our commitment. During fiscal year 2016, we converted $17.1 million in deferred payment arrangements, previously recorded as long-term unbilled accounts receivable, with MPTC to a long-term note receivable due September 30, 2018.

As of September 30, 2016, our outstanding loans to California Proton Treatment Center, LLC ("CPTC") to fund the development, construction and initial operations of the Scripps Proton Therapy Center were $95.3 million.

See Note 16, "VPT Loans" of the Notes to the Consolidated Financial Statements for further discussion on our VPT loans.

GTC, our scientific research facility, invests in developing technologies that enhance our current businesses or which may lead to new business areas, including next generation digital X-ray imaging technology, volumetric and functional imaging, and improved X-ray sources and technology for security and cargo screening applications. In addition, GTC develops technologies and products that are designed to improve disease management by more precise targeting of radiation, as well as by employing targeted energy and molecular agents to enhance the effectiveness and broaden the application of radiation therapy. GTC is engaged in searching for chemical or biological agents that work synergistically with radiation to improve treatment outcomes.

Revenues from our “Other” category represented 5%, 4% and 1% of total revenues in fiscal year 2016, 2015 and 2014, respectively. For a discussion of segment financial information, see Note 17, "Segment Information" of the Notes to the Consolidated Financial Statements.

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Marketing and Sales

We employ a combination of direct sales forces and independent distributors or resellers for the marketing and sales of our products worldwide. The recent environment has been characterized by fluctuations in gross orders and revenues in and among our geographic regions, with a greater percentage coming from emerging markets within our international region, as well as ongoing concerns about the global economy. As a U.S.-based company, the competitiveness of our product pricing is influenced by the fluctuation of the U.S. Dollar against other currencies. A stronger U.S. Dollar against foreign currencies would make our product pricing more expensive and less competitive compared to products sold in non-U.S. Dollar currencies. A stronger U.S. Dollar against foreign currencies would also lower our international revenues and gross orders when measured in U.S. Dollars. These conditions affected our business and demand for our products in fiscal year 2015 and the first half of fiscal year 2016. In fiscal years 2016, 2015 and 2014, we did not have a single customer that represented 10% or more of our total revenues.

Oncology Systems

For our Oncology Systems business segment, we sell direct in the United States and Canada and use a combination of direct sales and independent distributors in international regions. In September 2016, we acquired the radiotherapy business of Candela sp. z o.o. ("Candela"), the distributor of our radiotherapy equipment in Poland. This acquisition allows us to serve customers more effectively and improve access to advanced care for cancer patients in Poland. Through our strategic global partnership with Siemens, we represent Siemens diagnostic imaging products to radiation oncology clinics in most global markets. Siemens represents our equipment and software products for radiotherapy and radiosurgery to its healthcare customers in agreed upon countries. We sell our Oncology Systems products primarily to university research and community hospitals, private and governmental institutions, healthcare agencies, physicians' offices and cancer care clinics worldwide. These hospitals, institutes, agencies, physicians' offices and clinics replace equipment and upgrade treatment capability as technology evolves. Sales cycles for our external beam radiotherapy products typically can be quite lengthy since many of them are considered capital equipment and are affected by budgeting cycles. Our customers frequently fix capital budgets one or more years in advance. In recent years, we have seen the purchasing cycle lengthen as a result of the more complex decision-making process associated with larger dollar value transactions for more sophisticated IGRT and surgical equipment, and other technical advances.

During the last economic downturn, we saw customers' decision-making process further complicated and lengthened, especially in the United States, which caused hospitals, clinics and research institutions to more closely scrutinize and prioritize their capital spending in light of tightened capital budgets, tougher credit requirements, the general constriction in credit availability, and consolidation of providers. In addition, the last economic downturn caused customers to delay requested delivery dates. Because our product revenues are influenced by the timing of product shipments, which are tied to customer-requested delivery dates, these delivery delays increased the average order to revenue conversion cycle in the United States. Historically, this conversion cycle has been longer when new products are introduced or when we sell more products internationally. The lengthening of our order to revenue conversion cycle could reduce our revenues and margins. In addition, the same factors impacting the order to revenue conversion cycle may extend the receivables collection cycle and potentially increase bad debts.

Over the last few years, we have seen a greater percentage of Oncology Systems gross orders and revenues coming from emerging markets, which typically purchase lower-priced products, and which generally have lower gross margin percentages, compared to developed markets. We have also seen an increased portion of gross orders and revenues coming from services and software licenses, both of which have higher gross margin percentages than our hardware products. Additionally, we have been investing a higher portion of our Oncology Systems research and development budget in software and software-related products.

Reimbursement rates in the United States have generally supported a favorable return on investment for the purchase of new radiotherapy equipment. While we believe that improved product functionality, greater cost-effectiveness and prospects for better clinical outcomes with new capabilities such as IMRT, IGRT and VMAT tend to drive demand for radiotherapy products, large changes in reimbursement rates or reimbursement structure can affect customer demand and cause market shifts. We do not know what impact the Medicare Access & CHIP Reauthorization Act of 2015 ("MACRA") or the Patient Protection and Affordable Care Act (the "Affordable Care Act") or its potential repeal, or

changes in administration and policy resulting from the recent U.S. presidential election, will have on long-term growth or demand for our products and services. We believe, however, that growth of the radiation oncology market in the United States is being impacted as customers' decision-making processes are complicated by the uncertainties surrounding MACRA and the Affordable Care Act and reimbursement rates for radiotherapy and radiosurgery, and that this uncertainty will continue in future fiscal years. We also believe that the Affordable Care Act, the rise of Accountable Care Organizations and increased bundled payment arrangements are all causing healthcare

providers to re-evaluate their business models, and we are seeing increased consolidation of hospitals and clinics and more integration of systems and equipment across multi-site healthcare networks, which is impacting transaction size, timing and purchasing processes, all of which are contributing to increased uncertainty in the radiation oncology market as well as variability in our gross orders and revenues.

Total revenues for our Oncology Systems business segment were approximately $2.5 billion, $2.3 billion, and $2.3 billion for fiscal years 2016, 2015 and 2014, respectively. We divide our market segments for Oncology Systems revenues by region into The Americas, EMEA, and APAC, and these regions constituted 50%, 30%, and 20%, respectively, of Oncology Systems revenues during fiscal year 2016; 52%, 30%, and 18%, respectively, of Oncology Systems revenues during fiscal year 2015; and 50%, 30%, and 20%, respectively, of Oncology Systems revenues during fiscal year 2014.

Imaging Components

Our Imaging Components business segment employs a combination of direct sales and independent distributors for sales in all of its regions and sells a high proportion of our X-ray imaging components products and security and inspection products to a limited number of OEM customers. The long-term fundamental growth driver of this business segment is the on-going success of our key OEM customers, and we expect that revenues from relatively few customers will continue to account for a high percentage of Imaging Components revenues in the foreseeable future. Our ten largest OEM customers represented 54%, 62% and 63% of our total Imaging Components segment revenues during fiscal years 2016, 2015 and 2014, respectively. A significant portion of our Imaging Components customers are outside of the United States and products in this business are generally priced in U.S. Dollars. As a result, the demand for Imaging Components products has been negatively impacted by the strengthening of the U.S. Dollar, which began in the fourth of quarter of fiscal year 2014, and this has caused our products to be priced higher compared to products sold in non-U.S. Dollar currencies. In addition, some customers have asked for additional discounts, delayed purchasing decisions, or moved to in-sourcing supply of such components or migrated to lower cost alternatives.

We also sell our security and inspection products to regional integrators outside the United States as well as commercial enterprises in the casting, power, aerospace, chemical, petro-chemical and automotive industries for use in non-destructive investigation and testing applications. We believe demand for our security and inspection products is driven primarily by cargo screening, border protection, and non-destructive testing needs domestically and internationally. This business is heavily influenced by domestic and international government policies on border and port security, political change and government budgets. International sales of certain of our Linatron X-ray accelerators are subject to U.S. export licenses that are issued at the discretion of the U.S. government. Orders and revenues for our security and inspection products have been and may continue to be unpredictable as governmental agencies may place large orders with us or with our OEM customers over a short period of time and then may not place additional orders until complete deployment and installation of previously ordered products. We have seen domestic and international governments postpone purchasing decisions and delay installations of products for security and inspection systems. These postponements and delays have been and may in the future be related to re-evaluating program priorities, evaluating funding options, and collaboration between individual government agencies. Furthermore, tender awards in this business may be subject to challenge by third parties, as we have previously encountered, which can make the conversion of orders to revenues unpredictable for some security and inspection products. The market for border protection systems has slowed significantly and end customers, particularly in oil-based economies and war zones in which we have a significant customer base, are delaying system deployments or tenders and have considered moving to alternative sources, resulting in a decline in the demand for security and inspection products.

Changes in access to diagnostic radiology or the reimbursement rates associated with diagnostic radiology as a result of the Affordable Care Act or its potential repeal, and similar state proposals, or changes in administration and policies resulting from the recent U.S. presidential election, will likely affect domestic demand for our products in our Imaging Components business.

Total revenues for our Imaging Components business segment were $597.6 million, $611.2 million and $660.2 million for fiscal years 2016, 2015 and 2014, respectively. We divide our market segments for Imaging Components

revenues by region into The Americas, EMEA, and APAC, and these regions constituted 34%, 30%, and 36%, respectively, of Imaging Components revenues during fiscal year 2016; 35%, 26%, and 39%, respectively, of Imaging Components revenues during fiscal year 2015 and 35%, 28%, and 37%, respectively, of Imaging Components revenues during fiscal year 2014.

Other

In the VPT business, we primarily use direct sales specialists who collaborate with our Oncology Systems sales group globally on projects. Potential customers are government-sponsored hospitals and research institutions and research universities, which typically purchase products through public tenders, as well as private hospitals, clinics and private developers. While this

market is still developing and can be highly variable, there has been significant growth in this market over the last several years and we believe that growth in this business will continue in the major metropolitan areas in the United States and abroad, driven by institutions that wish to expand their clinical offerings and increase their profile in their respective communities. We are investing substantial resources to grow this business. Proton therapy facilities are large-scale construction projects that are time consuming and involve significant customer investment and often complex project financing. Consequently, this business is vulnerable to general economic and market conditions, as well as reimbursement rates. Customer decision-making cycles tend to be very long, and orders generally involve many contingencies. We have seen tight credit markets, particularly for large capital projects, constrain the ability of proton therapy projects to obtain financing.

Backlog

Backlog is the accumulation of all gross orders for which revenues have not been recognized and are still considered valid. Backlog also includes a small portion of billed service contracts that are included in deferred revenue. Backlog is stated at historical foreign currency exchange rates, and revenue is released from backlog at current exchange rates, with any difference recorded as a backlog adjustment. Orders may be revised or canceled, either according to their terms or as customers' needs change; consequently, it is difficult to predict with certainty the amount of backlog that will result in revenues. Our backlog at the end of fiscal year 2016 was $3.5 billion, of which we expect to recognize approximately 49% to 54% as revenues in fiscal year 2017. Our backlog at the end of fiscal year 2016 included approximately $272 million in VPT. Our backlog at the end of fiscal year 2015 was $3.5 billion, of which $1.8 billion was recognized as revenues in fiscal year 2016. Our Oncology Systems backlog represented 85% and 82% of the total backlog at the end of fiscal years 2016 and 2015, respectively.

Gross orders are defined as the sum of new orders recorded during the period adjusted for any revisions to existing orders during the period. New orders are recorded for the total contractual amount, excluding certain pass-through items, once a written agreement for the delivery of goods or provision of services is in place and, for businesses other than VPT, when shipment of the product (or in the case of certain highly customized products in our Imaging Components business, construction of the product) is expected to occur within two years, so long as any contingencies are deemed perfunctory. However, we will not record security and inspection products orders from governmental agencies with bid protest provisions until the expiration of the bid protest period. For our VPT business, we record orders when construction of the related proton therapy treatment center is reasonably expected to start within two years, but only if any contingencies are either deemed perfunctory or if the existence and nature of material contingencies is disclosed. However, we will not record VPT orders if there are major financing contingencies, if a substantial portion of the financing for the project is not reasonably assured or if customer board approval contingencies are pending.

We perform a quarterly review to verify that outstanding orders in the backlog remain valid. Aged orders that are not expected to be converted to revenues are deemed dormant and are reflected as a reduction in the backlog amounts and net orders in the period identified. Backlog adjustments are comprised of dormancies, cancellations, foreign currency exchange rate adjustments, backlog from acquisitions and other adjustments. In fiscal years 2016, 2015 and 2014, our backlog adjustments were a reduction of $203.8 million, $214.9 million and $176.3 million, respectively.

Competition

Rapidly evolving technology, intense competition and pricing pressure characterize the markets for radiation therapy equipment and software products. We compete with companies worldwide, some of whom may have greater financial, marketing and other resources than we have. Our competitors could develop technologies and products that are more effective than those we currently use or produce or that could render our products obsolete or noncompetitive. Our smaller competitors could be acquired by companies with greater financial strength, which could enable them to compete more aggressively. Some of our suppliers or distributors could also be acquired by competitors, which could disrupt these supply or distribution arrangements and result in less predictable and reduced revenues. Furthermore, we believe that new competitors and new competitive technologies will enter our markets as new technologies are promulgated, such as radiosurgery, VMAT, MR-Linac and proton therapy. We have directed substantial product development efforts into (i) increasing the interconnectivity of our products for more seamless operation within a system, (ii) enhancing the ease of use of our software products and (iii) reducing setup and treatment times and

increasing patient throughput. We have also maintained an “open systems” approach that allows customers to “mix and match” our various individual products, incorporate products from other manufacturers, share information with other systems or products and use the equipment for offering various methods of radiation therapy treatment. We have done this based on our belief that such interconnectivity will increase the acceptance and adoption of IMRT, IGRT and VMAT and will stimulate demand for our products. There are competitive “closed-ended” dedicated-use systems, however, that place simplicity of use ahead of flexibility. If we have misjudged the importance to our customers of maintaining an “open systems” approach, or if we are unsuccessful in our efforts to sustain interconnectivity, enhance ease-of-use and reduce setup and treatment times, our revenues could suffer.

Our Oncology Systems customers' equipment purchase considerations typically include: reliability, servicing, patient throughput, precision, price, payment terms, connectivity, clinical features, the ability to track patient referral patterns, long-term relationship and capabilities of customers' existing equipment. We believe we compete favorably with our competitors based upon our strategy of providing a complete package solution of products and services in the field of radiation oncology and our continued commitment to global distribution and customer services, value-added manufacturing, technological leadership and new product innovation. To compete successfully, we must provide technically superior, clinically proven products that deliver more precise, cost effective, high quality clinical outcomes, together in a complete package of products and services, and do so ahead of our competitors. Since our Oncology Systems products are generally sold on a basis of total value to the customer, our business may suffer when purchase decisions are based solely upon price, which can happen if hospitals and clinics give purchasing decision authority to group purchasing organizations. Further, competitors may delay customer purchasing decisions as customers evaluate the products of these competitors along with ours, potentially extending our sales cycle and adversely affecting our gross orders.

We are the leading provider of medical linear accelerators and related accessories. In radiotherapy and radiosurgery markets, we compete primarily with Elekta AB and Accuray Incorporated. Additionally, Elekta AB and ViewRay Incorporated recently announced the introduction of MR-Linac devices that are also expected to compete with us in this market. With our information and image management, simulation, treatment planning and radiosurgery products, we also compete with a variety of companies, such as Philips Medical Systems, RaySearch Laboratories AB, Brainlab AG and Best Theratronics, Ltd. We also encounter some competition from providers of enterprise hospital information systems. With respect to our brachytherapy solutions, our competitors are Elekta AB, MIM Software Inc. and Eckert & Ziegler BEBIG GmbH. In our Oncology Systems service and maintenance business, we compete with independent service organizations and our customers' internal service organizations.

In addition, as a radiotherapy and radiosurgery equipment provider, we also face competition from other cancer treatment alternatives, such as traditional surgery, chemotherapy, robotic surgery and drug therapies, among others. To compete successfully, we need to demonstrate and convince our customers and cancer patients of the advantages of radiation therapy over other cancer treatment alternatives. This may involve funding and, in some instances, sponsoring clinical research and studies relating to the efficacy, comparative effectiveness and safety of radiation therapy as compared to such other alternative treatments.

With respect to our medical imaging components within our Imaging Components business segment, we often compete with the in-house manufacturing operations of the major diagnostic imaging systems companies, which are the primary OEM customers for our medical imaging components. As a result, in order to compete successfully we must maintain a competitive advantage in one or more significant areas, which may include lower product cost, better product quality or superior technology and/or performance. We sell a significant volume of our X-ray tubes to OEM customers that have in-house X-ray tube production capability. In addition, we compete against other stand-alone, independent X-ray tube manufacturers such as Comet AG and IAE Industria Applicazioni Elettroniche Spa as well as small start-up manufacturers in China. These companies compete with us for both the OEM business of major diagnostic imaging equipment manufacturers and the independent servicing business for X-ray tubes. The market for flat panel detectors is also very competitive. We incorporate our flat panel detectors into our equipment for IGRT within our Oncology Systems and also sell these flat panel detectors to a number of OEM customers, which incorporate our flat panel detectors into their medical diagnostic, dental, veterinary and industrial imaging systems. Our amorphous silicon based flat panel detector technology competes with other detector technologies such as amorphous selenium, charge-coupled devices and variations of amorphous silicon scintillators. We believe that our product provides a competitive advantage due to lower product cost and better product quality and performance. In the flat panel market, we primarily compete against Perkin-Elmer, Inc., Trixell S.A.S., Vieworks Co., Ltd., Canon, Inc., and Hamamatsu Corporation as well as emerging low cost manufacturers from China such as iRay Technology (Shanghai) Limited, and Jiangsu CareRay Medical Systems Co., Ltd.

With respect to our security and inspection products within our Imaging Components business segment, we compete with other OEM suppliers, primarily outside the United States in the security and inspection market. Currently, our major competitor is Nuctech Company Limited, and we have also seen some competition from Siemens. The market

for our security and inspection products used for nondestructive testing in industrial applications is small and highly fragmented, and we compete against Nuctech Company Limited, Siemens and Foton, among other companies, in that segment.

The market for proton therapy products is still developing and is characterized by rapidly evolving technology, high competition and pricing pressure. Our ability to compete successfully depends, in part, on our ability to lower our product costs, and develop and provide technically superior, clinically proven products that deliver more precise, cost-effective, high quality clinical outcomes, including integration of IGRT technologies such as integrated volumetric imaging. In the proton therapy market, we compete principally with Hitachi Heavy Industries, Ion Beam Applications S.A., Mevion Medical Systems,

Inc. and Sumitomo Heavy Industries, Ltd. There are a number of smaller competitors that are also developing proton therapy products. We are the only established company in the field of radiation therapy to enter the particle therapy market directly.

Customer Services and Support

We warrant most of our Oncology Systems products for parts and labor for 12 months, and we offer a variety of post-warranty equipment service contracts and software support contracts to suit customers' requirements. Our domestic service centers are in Atlanta, Georgia; Las Vegas, Nevada; and Milpitas, California. Our international service centers are in Australia, Austria, Belgium, Brazil, Canada, China, Denmark, Finland, France, Germany, Hungary, India, Italy, Japan, Malaysia, the Netherlands, Russia, Saudi Arabia, Singapore, South Korea, Spain, Switzerland, Thailand, United Arab Emirates, and the United Kingdom. We also have field service personnel throughout the world for Oncology Systems customer support services. Key Oncology Systems education operations are located in Beijing, China; Cham, Switzerland; Las Vegas, Nevada; Mumbai, India; and Tokyo, Japan. Our network of service engineers and customer support specialists provide installation, warranty, repair, training and support services, project management, site planning, and professional services. We also have a distributed service parts network of regional hubs and forward-stocking locations across all major geographic areas. We generate service revenues by providing our customers with time-and-materials services, replacement part sales, post-warranty equipment service contracts and software support contracts. Most of the field service engineers are our employees, but our products are serviced by employees of distributors and/or agents in a few foreign countries. Customers can access our extensive service network by calling any of our service centers.

We believe customer service and support are an integral part of our Oncology Systems competitive strategy. Growth in our service revenues has resulted from the increasing customer adoption of service contracts as the sophistication and installed base of our products increase. We also believe superior service plays an important role in marketing and selling medical products and systems, particularly as the products become more complex. Nevertheless, some of our customers use their own internal service organizations and/or independent service organizations to service equipment after the warranty period expires and therefore do not enter into agreements with us for extended service.

We generally warrant our medical imaging components and security and inspection products for 12 months. We provide technical advice and consultation for medical imaging components to major OEM customers from our offices in Charleston, South Carolina; Downers Grove, Illinois; Liverpool, New York; and Salt Lake City, Utah; and internationally in China, Germany, Japan, Netherlands and the Philippines. Our applications specialists and engineers make recommendations to meet the customer's technical requirements within the customer's budgetary constraints. We often develop specifications for a unique product, which will be designed and manufactured to meet a specific customer's requirements. We also maintain a technical customer support group in Charleston, South Carolina and Liverpool, New York to meet the technical support requirements of independent service companies that use our medical imaging components products. We provide technical support and service for our security and inspection products to major OEM customers from our offices in Las Vegas, Nevada; and Lincolnshire, Illinois and internationally in Belgium, France, Italy, Japan and the United Kingdom.

In the VPT business, we sell our proton therapy equipment generally with a 12-month warranty. Upon transfer of a treatment room to a customer, we generally begin generating service revenues by providing on-site proton therapy system technical operation and maintenance support services, which typically are for relatively long-term periods (i.e., a five-year term or longer). We believe customer service and support are an integral part of our VPT competitive strategy.

Manufacturing and Supplies

We manufacture our medical linear accelerators in Palo Alto, California and in Beijing, China. Our treatment simulator systems and some accelerator subsystems are manufactured in Crawley, United Kingdom and some of our other accessory products in Baden, Switzerland; Helsinki, Finland; Toulouse, France; and Winnipeg, Canada. We manufacture our high dose rate brachytherapy systems in Crawley, United Kingdom; and Haan, Germany and our brachytherapy treatment planning products in Charlottesville, Virginia. We manufacture Calypso components for tumor tracking and motion management products in Seattle, Washington. Our security and inspection linear accelerators are principally manufactured in Las Vegas, Nevada. We manufacture components and sub-systems for

our proton therapy products and systems in Troisdorf, Germany. We manufacture our X-ray imaging component products in Charleston, South Carolina; Downers Grove, Illinois; Liverpool, New York; and Salt Lake City, Utah and internationally in Beijing, China; Bremen, Germany; Dinxperlo, Netherlands; Manila, Philippines; Willich, Germany; and Wuxi, China. These facilities employ state-of-the-art manufacturing techniques, and several have been honored by the press, governments and trade organizations for their commitment to quality improvement. These manufacturing facilities are certified by International Standards Organization ("ISO") under ISO 9001 (for security and inspection products) or ISO 13485 (for medical devices).

Manufacturing processes at our various facilities include machining, fabrication, subassembly, system assembly and final testing. We have invested in various automated and semi-automated equipment for the fabrication and machining of the parts and assemblies that we incorporate into our products. We may, from time to time, invest further in such equipment. Our quality assurance program includes various quality control measures from inspection of raw materials, purchased parts and assemblies through on line inspection. We outsource the manufacturing of many major subassemblies and perform system design, assembly and testing in house. We believe outsourcing enables us to reduce or maintain fixed costs and capital expenditures, while also providing us with the flexibility to increase production capacity. We purchase material and components from various suppliers that are either standard products or customized to our specifications. We obtain some of the components included in our products from a limited group of suppliers or from a single source supplier, such as: the radioactive sources for high dose afterloaders; klystrons for linear accelerators; transistor arrays and cesium iodide coatings for flat panel detectors; specialized integrated circuits, X-ray tube targets, housings, glassframes and various other components in X-ray Products; and radiofrequency components, magnets and gantry hardware for proton therapy systems. We require certain raw materials such as tungsten, lead and copper for Oncology Systems and security and inspection products; copper, lead, tungsten, rhenium, molybdenum zirconium, and various high grades of steel alloy for X-ray tubes; and high-grade steel, high-grade copper and iron for the VPT business. Worldwide demand, availability and pricing of these raw materials have been volatile, and we expect that availability and pricing will continue to fluctuate in the future.

Research and Development

Developing products, systems and services based on advanced technology is essential to our ability to compete effectively in the marketplace. We maintain a research and development and engineering staff responsible for product design and engineering. Research and development expenses totaled $253.5 million, $245.2 million and $234.8 million in fiscal years 2016, 2015 and 2014, respectively.

Our research and development are conducted both within the relevant product groups of our businesses and through GTC. GTC maintains technical expertise in X-ray technology, accelerator technology, imaging physics and applications, algorithms and software, electronic design, materials science and biosciences to prove feasibility of new product concepts and to improve current products. Recent research topics include new imaging concepts, image based radiotherapy treatment planning and delivery, real-time accommodation of moving targets, functional imaging and combined modality therapy, manufacturing process improvements, improved X-ray tubes and large-area, high resolution digital X-ray sensor arrays for cone-beam CT and other applications. GTC also investigates the potential of combining advances in directed energy and imaging technology with the latest breakthroughs in biotechnology by employing targeted energy to enhance the effectiveness of biological and chemical therapeutic agents, as well as the use of X-ray and high-energy accelerator, detector, and image processing technology for security applications. GTC accepts some sponsored research contracts from external agencies such as the U.S. government or private sources.

Within Oncology Systems, our development efforts focus on enhancing the reliability and performance of existing products and developing new products. This development is conducted primarily in the United States, Switzerland, Canada, England, Finland, Germany, India and China. In addition, we support research and development programs at selected hospitals and clinics. Current areas for development within Oncology Systems include linear accelerator systems and accessories for medical applications, information systems, radiation treatment planning software, image processing software, imaging devices, simulation, patient positioning and equipment diagnosis and maintenance tools. Development for our high-energy linear accelerators is focused on improvements in accelerator technology, size, and mobility to address the needs of our customers in the market.

Within Imaging Components, development is primarily conducted at our Las Vegas, Nevada; Salt Lake City, Utah; Palo Alto, California; Liverpool, New York; Lincolnshire, Illinois and Downers Grove, Illinois facilities domestically and at our Netherlands and Germany facilities internationally and is primarily focused on developing and improving medical imaging component technology. Current X-ray tube development areas include improvements to tube life and tube stability and reduction of tube noise. We are also working on X-ray tube designs which will operate at higher power loadings and at higher CT rotational speed to enhance the performance of next generation CT scanners as well as generators for medical imaging. Research in imaging technology is aimed at developing new panel technologies for low cost radiographic imaging, wireless panel interfaces, better dose utilization in dental imaging, improved image

quality for cone beam CT and new image processing tools for advanced applications.

Within VPT, our development efforts focus on integrating patient set-up, motion management and clinical workflow solutions originally developed in Oncology Systems as well as reducing the size of our proton therapy system. We expect that, in order to realize the full potential of the VPT business, we will need to invest substantial resources to continue to develop proton therapy technology.

Product and Other Liabilities

Our business exposes us to potential product liability claims that are inherent in the manufacture, sale, installation, servicing and support of medical devices and other devices that deliver radiation. Because our products are involved in the intentional delivery of radiation to the human body and other situations where people may come in contact with radiation (for example, when our security and inspection products are being used to scan cargo), the collection and storage of patient treatment data for medical analysis and treatment delivery, the planning of radiation treatment and diagnostic imaging of the human body, and the diagnosis of medical problems, the possibility for significant injury and/or death exists. Our medical products operate within our customers' facilities and network systems, and under quality assurance procedures established by the facilities that ultimately deliver radiation to patients. Human and other errors or accidents may arise from the operation of our products in complex environments, particularly with products from other vendors, where interoperability or data sharing protocol may not be optimized even though the equipment or system operates according to specifications. As a result, we may face substantial liability to patients, our customers and others for damages resulting from the faulty, or allegedly faulty, design, manufacture, installation, servicing, support, testing or interoperability of our products with other products, or their misuse or failure, as well as liability related to the loss or misuse of private patient data, including resulting from unauthorized intrusion into our products. We may also be subject to claims for property damages or economic loss related to or resulting from any errors or defects in our products, or the installation, servicing and support of our products. Any accident or mistreatment could subject us to legal costs, litigation, adverse publicity and damage to our reputation, whether or not our products or services were a factor. In addition, if a product we design or manufacture were defective (whether due to design, labeling or manufacturing defects, improper use of the product or other reasons), or found to be so by a competent regulatory authority, we may be required to correct or recall the product and notify other regulatory authorities. We maintain limited product liability insurance coverage and currently self-insure professional liability/errors and omissions liability.

Government Regulation

U.S. Regulations

Laws governing marketing a medical device. In the United States, as a manufacturer and seller of medical devices and devices emitting radiation or utilizing radioactive by-product material, we and some of our suppliers and distributors are subject to extensive regulation by federal governmental authorities, such as the FDA, Nuclear Regulatory Commission ("NRC"), and state and local regulatory agencies, such as the State of California, to ensure the devices are safe and effective and comply with laws governing products which emit, produce or control radiation. Similar international regulations apply overseas. These regulations, which include the U.S. Food, Drug and Cosmetic Act (the "FDC Act") and regulations promulgated by the FDA, govern, among other things, the design, development, testing, manufacturing, packaging, labeling, distribution, import/export, sale and marketing and disposal of medical devices, post market surveillance and reporting of serious injuries and death, repairs, replacements, recalls and other matters relating to medical devices, radiation emitting devices and devices utilizing radioactive by-product material. State regulations are extensive and vary from state to state. Our Oncology Systems equipment and software, as well as proton therapy systems offered by our VPT business, constitute medical devices subject to these regulations. Our X-ray tube products, imaging workstations and flat panel detectors are also considered medical devices. Under the FDC Act, each medical device manufacturer must comply with quality system regulations that are strictly enforced by the FDA.

Unless an exception applies, the FDA requires that the manufacturer of a new medical device or a new indication for use of, or other significant change in, existing currently marketed medical device obtain either 510(k) pre-market notification clearance or pre-market approval ("PMA") before it can market or sell those products in the United States. The 510(k) clearance process is applicable when the device introduced into commercial distribution is substantially equivalent to a legally marketed device. The process of obtaining 510(k) clearance generally takes at least six months from the date the application is filed, but could take significantly longer, and generally requires submitting supporting testing data. After a product receives 510(k) clearance, any modifications or enhancements to a product that could significantly affect its safety or effectiveness, or that would constitute a major change in the intended use of the device, technology, materials, labeling, packaging, or manufacturing process may require a new 510(k) clearance. The

FDA requires each manufacturer to make this determination in the first instance, but the FDA can review any such decision. If the FDA disagrees with the manufacturer's decision, it may retroactively require the manufacturer to submit a request for 510(k) pre-market notification clearance and can require the manufacturer to cease marketing and/or recall the product until 510(k) clearance is obtained. The FDA has issued draft guidance that, if finalized and implemented, will result in manufacturers needing to seek a significant number of new clearances for changes made to legally marketed devices. If we cannot establish that a proposed product is substantially equivalent to a legally marketed device, we must seek pre-market approval through a PMA application. Under the PMA process, the applicant submits extensive supporting data, including, in most cases, data from clinical studies, in the PMA application to establish reasonable evidence of the safety and effectiveness of the product. This process typically takes at least one to two years from the date the PMA is accepted for filing, but can take significantly longer for the FDA to review. To date, we have only manufactured Class I

medical devices, which do not require PMA or 510(k) clearance, and Class II medical devices, which require 510(k) clearance. We do not manufacture any Class III medical devices, which require PMA. Our X-ray tubes and flat panel detectors are Class I medical devices, while all of the medical devices produced by our Oncology Systems business segment and the proton therapy systems manufactured by our VPT business are Class II medical devices.

Quality systems. Our manufacturing operations for medical devices, and those of our third-party manufacturers, are required to comply with the FDA's Quality System Regulation ("QSR"), which addresses a company's responsibility for product design, testing, and manufacturing quality assurance, and the maintenance of records and documentation. The QSR requires that each manufacturer establish a quality systems program by which the manufacturer monitors the manufacturing process and maintains records that show compliance with FDA regulations and the manufacturer's written specifications and procedures relating to the devices. QSR compliance is necessary to receive and maintain FDA clearance or approval to market new and existing products. The FDA makes announced and unannounced periodic and on-going inspections of medical device manufacturers to determine compliance with the QSR. If in connection with these inspections the FDA believes the manufacturer has failed to comply with applicable regulations and/or procedures, it may issue observations that would necessitate prompt corrective action. If FDA inspection observations are not addressed and/or corrective action taken in a timely manner and to the FDA's satisfaction, the FDA may issue a Warning Letter (which would similarly necessitate prompt corrective action) and/or proceed directly to other forms of enforcement action. Failure to respond timely to FDA inspection observations, a Warning Letter or other notice of noncompliance and to promptly come into compliance could result in the FDA bringing enforcement action against us, which could include the total shutdown of our production facilities, denial of importation rights to the United States for products manufactured in overseas locations and denial of export rights for U.S. products and criminal and civil fines.

The FDA and the Federal Trade Commission ("FTC") also regulate advertising and promotion of our products to ensure that the claims we make are consistent with our regulatory clearances, that there are adequate and reasonable scientific data to substantiate the claims and that our promotional labeling and advertising is neither false nor misleading. We may not promote or advertise our products for uses not within the scope of our intended use statement in our clearances or approvals or make unsupported safety and effectiveness claims.

It is also important that our products comply with electrical safety and environmental standards, such as those of Underwriters Laboratories ("UL"), the Canadian Standards Association ("CSA"), and the International Electrotechnical Commission ("IEC"). In addition, the manufacture and distribution of medical devices utilizing radioactive material requires a specific radioactive material license. For the United States, manufacture and distribution of these radioactive sources and devices also must be in accordance with a model specific certificate issued by either the NRC or by an Agreement State. In essentially every country and state, installation and service of these products must be in accordance with a specific radioactive materials license issued by the applicable radiation control agency. Service of these products must be in accordance with a specific radioactive materials license. We are also subject to a variety of additional environmental laws regulating our manufacturing operations and the handling, storage, transport and disposal of hazardous materials, and which impose liability for the cleanup of any contamination from these materials. For a further discussion of these laws and regulations, see "Critical Accounting Estimates" in MD&A, and Note 9, "Commitments and Contingencies" of the Notes to the Consolidated Financial Statements."

Other applicable U.S. regulations. As a participant in the healthcare industry, we are also subject to extensive laws and regulations protecting the privacy and integrity of patient medical information that we receive, including the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), "fraud and abuse" laws and regulations, including, physician self-referral prohibitions, and false claims laws. From time to time, these laws and regulations may be revised or interpreted in ways that could make it more difficult for our customers to conduct their businesses, such as recent proposed revisions to the laws prohibiting physician self-referrals, and such revisions could have an adverse effect on the demand for our products, and therefore our business and results of operations. We also must comply with numerous federal, state and local laws of more general applicability relating to such matters as safe working conditions, manufacturing practices and fire hazard control.

The laws and regulations and their enforcement are constantly undergoing change, and we cannot predict what effect, if any, changes to these laws and regulations may have on our business. For example, national and state laws regulate

privacy and may regulate our use of data. Furthermore, HIPAA was amended by the HITECH Act to provide that business associates who have access to patient health information provided by hospitals and healthcare providers are now directly subject to HIPAA, including the associated enforcement scheme and inspection requirements.

Medicare and Medicaid Reimbursement

The federal and state governments of the United States establish guidelines and pay reimbursements to hospitals and free-standing clinics for diagnostic examinations and therapeutic procedures under Medicare at the federal level and Medicaid at the

state level. Private insurers often establish payment levels and policies based on reimbursement rates and guidelines established by the government.

The federal government and the Congress review and adjust rates annually, and from time to time consider various Medicare and other healthcare reform proposals that could significantly affect both private and public reimbursement for healthcare services, including radiotherapy and radiosurgery, in hospitals and free-standing clinics. In the past, we have seen our customers' decision-making process complicated by the uncertainties surrounding reimbursement rates for radiotherapy and radiosurgery in the United States. State government reimbursement for services is determined pursuant to each state's Medicaid plan, which is established by state law and regulations, subject to requirements of federal law and regulations.

The provisions of the Affordable Care Act went into effect in 2012. Specifically, one of the components of the law is a 2.3% excise tax on sales of most medical devices, which include our Oncology Systems products, which started on January 1, 2013. In December 2015, the President signed into law a spending package that included a two year moratorium on the medical device tax starting January 1, 2016 and ending December 31, 2017. This tax has had, and may continue to have, a negative impact on our gross margin when the moratorium expires. Other elements of this legislation, including comparative effectiveness research, an independent payment advisory board, payment system reforms (including shared savings pilots) and other provisions, could meaningfully change the way healthcare is developed and delivered, and may materially impact numerous aspects of our business, including the demand and availability of our products, the reimbursement available for our products from governmental and third-party payors, and reduced medical procedure volumes. In addition, it is possible that changes in administration and policy, including the potential repeal of the Affordable Care Act, resulting from the recent U.S. presidential election could result in additional proposals and/or changes to health care system legislation which could have a material adverse effect on our business.

In April of 2015, MACRA was signed into law, which made numerous changes to Medicare, Medicaid, and other healthcare related programs. These changes include new systems for establishing the annual updates to payment rates for physicians' services in Medicare. MACRA is effective beginning January 1, 2017. Our business may be significantly and negatively affected by MACRA and any changes in reimbursement policies and other legislative initiatives aimed at or having the effect of reducing healthcare costs associated with Medicare and other government healthcare programs.

Various healthcare reform proposals have also emerged at the state level, and we are unable to predict which, if any of these proposals will be enacted. We believe that the uncertainty created by healthcare reform in the United States has complicated our customers' decision-making process and impacted our Oncology Systems and VPT businesses, and may continue to do so.

The sale of medical devices including radiotherapy products, the referral of patients for diagnostic examinations and treatments utilizing such devices, and the submission of claims to third-party payors (including Medicare and Medicaid) seeking reimbursement for such services, are subject to various federal and state laws pertaining to healthcare "fraud and abuse." These laws include physician self-referral prohibitions, anti-kickback laws and false claims laws. Subject to enumerated exceptions, the federal physician self-referral law, also known as Stark II, prohibits a physician from referring Medicare or Medicaid patients to an entity with which the physician (or a family member) has a financial relationship, if the referral is for a "designated health service," which is defined explicitly to include radiology and radiation therapy services. Anti-kickback laws make it illegal to solicit, induce, offer, receive or pay any remuneration in exchange for the referral of business, including the purchase of medical devices from a particular manufacturer or the referral of patients to a particular supplier of diagnostic services utilizing such devices. False claims laws prohibit anyone from knowingly and willfully presenting, or causing to be presented, claims for payment to third-party payors (including Medicare and Medicaid) that are false or fraudulent, for services not provided as claimed, or for medically unnecessary services. The Office of the Inspector General prosecutes violations of fraud and abuse laws and any violation may result in criminal and/or civil sanctions including, in some instances, imprisonment and exclusion from participation in federal healthcare programs such as Medicare and Medicaid.

Foreign Regulations

Our operations, sales and service of our products outside the United States are subject to regulatory requirements that vary from country to country and may differ significantly from those in the United States. In general, our products are regulated outside the United States as medical devices by foreign governmental agencies similar to the FDA. Marketing a medical device internationally. In order for us to market our products internationally, we must obtain clearances or approvals for products and product modifications. We are required to affix the CE mark to our products in order to sell them in member countries of the European Economic Area ("EEA"). The CE mark is an international symbol of adherence to certain essential principles of safety and effectiveness, which once affixed enables a product to be sold in member countries of the EEA. The CE mark is also recognized in many countries outside the EEA, such as Switzerland and Australia, and can assist in

the clearance process. In order to receive permission to affix the CE mark to our products, we must obtain Quality System certification, e.g., ISO 13485, and must otherwise have a quality management system that complies with the EU Medical Device Directive. The ISO promulgates standards for certification of quality assurance operations. We are certified as complying with the ISO 9001 for our security and inspection products and ISO 13485 for our medical devices. Several Asian countries, including Japan and China, have adopted regulatory schemes that are comparable, and in some cases more stringent, than the EU scheme. To import medical devices into Japan, the requirements of Japan's New Medical Device Regulation must be met and a "shonin," the approval to sell medical products in Japan, must be obtained. Similarly, in China a registration certification issued by the State Food and Drug Administration and a China Compulsory Certification mark for certain products are required to sell medical devices in that country. Obtaining such certifications on our products can be time-consuming and can cause us to delay marketing or sales of certain products in such countries. Similarly, prior to selling a device in Canada, manufacturers of Class II, III and IV devices must obtain a medical device license. We sell Class II and Class III devices in Canada. Additionally, many countries have laws and regulations relating to radiation and radiation safety that also apply to our products. In most countries, radiological regulatory agencies require some form of licensing or registration by the facility prior to acquisition and operation of an X-ray generating device or a radiation source. The handling, transportation and the recycling of radioactive metals and source materials are also highly regulated.

A number of countries, including the members of the EU, have implemented or are implementing regulations that would require manufacturers to dispose, or bear certain disposal costs, of products at the end of a product's useful life and restrict the use of some hazardous substances in certain products sold in those countries. For a further discussion of these regulations, see "Critical Accounting Estimates" in MD&A and Note 9, "Commitments and Contingencies" of the Notes to the Consolidated Financial Statements."

Manufacturing and selling a device internationally. We are also subject to laws and regulations outside the United States applicable to manufacturers of radiation-producing devices and products utilizing radioactive materials, and laws and regulations of general applicability relating to matters such as environmental protection, safe working conditions, manufacturing practices and other matters, in each case that are often comparable to, if not more stringent than, regulations in the United States. In addition, our sales of products in foreign countries are also subject to regulation of matters such as product standards, packaging requirements, labeling requirements, import restrictions, environmental and product recycling requirements, tariff regulations, duties and tax requirements. In some countries, we rely on our foreign distributors and agents to assist us in complying with foreign regulatory requirements.

Other applicable international regulations. In addition to the U.S. laws regarding the privacy and integrity of patient medical information, we are subject to similar laws and regulations in foreign countries covering data privacy and other protection of health and employee information. Particularly within Europe, data protection legislation is comprehensive and complex and there has been a recent trend toward more stringent enforcement of requirements regarding protection and confidentiality of personal data, as well as enactment of stricter legislation. We are also subject to international "fraud and abuse" laws and regulations, as well as false claims and misleading advertisement laws.

Anti-Corruption Laws and Regulations

We are subject to the U.S. Foreign Corrupt Practices Act and anti-corruption laws, and similar laws in foreign countries, such as the U.K. Bribery Act of 2010, which became effective on July 1, 2011, and the Law "On the Fundamentals of Health Protection in the Russian Federation," which became effective in January 2012. In general, there is a worldwide trend to strengthen anticorruption laws and their enforcement, and the healthcare industry and medical equipment manufacturers have been particular targets of these investigation and enforcement efforts. Any violation of these laws by us or our agents or distributors could create a substantial liability for us, subject our officers and directors to personal liability and also cause a loss of reputation in the market.

Transparency International's 2015 Corruption Perceptions Index measured the degree to which public sector corruption is perceived to exist in 168 countries/territories around the world, and found that nearly sixty-seven percent of the countries in the index, including many that we consider to be high growth areas for our products, such as China, India, Russia and Brazil, scored below 50, on a scale from 100 (very clean) to 0 (highly corrupt). We currently operate in

many countries where the public sector is perceived as being more or highly corrupt and our strategic business plans include expanding our business in regions and countries that are rated as higher risk for corruption activity by Transparency International.

Increased business in higher risk countries could subject us and our officers and directors to increased scrutiny and increased liability. In addition, becoming familiar with and implementing the infrastructure necessary to comply with laws, rules and regulations applicable to new business activities and mitigating and protecting against corruption risks could be quite costly. Failure by us or our agents or distributors to comply with these laws, rules and regulations could delay our expansion into high-growth markets and could adversely affect our business.

Patent and Other Proprietary Rights

We place considerable importance on obtaining and maintaining patent, copyright and trade secret protection for significant new technologies, products and processes, because of the length of time and expense associated with bringing new products through the development process and to the marketplace.

We generally rely upon a combination of patents, copyrights, trademarks, trade secret and other laws, and contractual restrictions on disclosure, copying and transferring title, including confidentiality agreements with vendors, strategic partners, co-developers, employees, consultants and other third parties, to protect our proprietary rights in the developments, improvements and inventions that we have originated and which are incorporated in our products or that fall within our fields of interest. As of September 30, 2016, we owned 519 patents issued in the United States and 257 patents issued throughout the rest of the world and had 484 patent applications on file with various patent agencies worldwide. We intend to file additional patent applications as appropriate. We have trademarks, both registered and unregistered, that are maintained and enforced to provide customer recognition for our products in the marketplace. We also have agreements with third parties that provide for licensing of patented or proprietary technology, including royalty bearing licenses and technology cross licenses.

Environmental Matters

For a discussion of environmental matters, see “Critical Accounting Estimates” in MD&A and Note 9, “Commitments and Contingencies” of the Notes to the Consolidated Financial Statements, which discussions are incorporated herein by reference.

Financial Information about Geographic Areas

We do business globally with manufacturing, engineering, and development in the United States, Europe, China, India and Canada with sales and service operations and customers throughout the world. More than half of our revenues are generated from our international regions. In addition to the potentially adverse impact of foreign regulations, see “Government Regulation—Foreign Regulations,” we also may be affected by other factors related to our international sales such as: lower average selling prices and profit margins; longer time periods from shipment to revenue recognition (which increases revenue recognition deferrals and time in backlog); and longer time periods from shipment to cash collection (which increases days sales outstanding (“DSO”)). To the extent that the geographic distribution of our sales continues to shift more towards international regions, our overall revenues and margins may suffer. We sell our products internationally predominantly in local currencies, but our cost structure is weighted towards the U.S. Dollar. Accordingly, there may be adverse consequences from fluctuations in U.S. Dollar and foreign currency exchange rates, which may affect both the affordability and competitiveness of our products and our profit margins. We engage in currency hedging strategies to offset the effect of fluctuations in foreign currency exchange rates, but the protection offered by these hedges depends upon the timing of transactions, the effectiveness of the hedges, the number of transactions that are hedged and forecast volatility.

We are also exposed to other economic, political and other risks inherent in doing business globally. For an additional discussion of these risks, see Item 1A, “Risk Factors.”

For a discussion of financial information about geographic areas, see Note 17, “Segment Information” of the Notes to the Consolidated Financial Statements and MD&A, which discussions are incorporated herein by reference.

Employees

We had approximately 7,800 full time and part-time employees worldwide, including approximately 3,900 in the United States and approximately 3,900 elsewhere at September 30, 2016. None of our employees based in the United States are unionized or subject to collective bargaining agreements. Employees based in some other countries may, from time to time, be represented by works councils or unions or subject to collective bargaining agreements. We consider our relations with our employees to be good.

Information Available to Investors

As soon as reasonably practicable after our filing or furnishing the information to the SEC, we make the following available free of charge on the Investors page of our website http://www.varian.com: our annual reports on Form 10-K; quarterly reports on Form 10-Q; current reports on Form 8-K (including any amendments to those reports); and proxy statements. Our Code of Conduct, Corporate Governance Guidelines and the charters of the Audit Committee, Compensation and Management Development Committee, Ethics and Compliance Committee, Nominating and

Corporate Governance Committee and Executive Committee are also available on the Investors page of our website. Investors and others should note that we

announce material financial and operational information to our investors using our investor relations website (http://investors.varian.com/), press releases, SEC filings and public conference calls and webcasts. Please note that information on, or that can be accessed through, our website is not deemed "filed" with the SEC and is not to be incorporated by reference into any of our filings under the Securities Act of 1933, as amended (the "Securities Act"), or the Securities Exchange Act of 1934, as amended (the "Exchange Act").

Executive Officers of the Registrant

The biographical summaries of our executive officers, as of November 1, 2016, are as follows:

Name	Age	Position
Dow R. Wilson	57	President and Chief Executive Officer
Elisha W. Finney	55	Executive Vice President, Finance and Chief Financial Officer
Kolleen T. Kennedy	57	Executive Vice President and President, Oncology Systems
John W. Kuo	53	Senior Vice President, General Counsel and Corporate Secretary
Sunny S. Sanyal	52	Senior Vice President and President, Imaging Components Business
Clarence R. Verhoef	61	Senior Vice President, Finance and Corporate Controller

Dow R. Wilson was appointed President and Chief Executive Officer effective September 29, 2012. Mr. Wilson served as Corporate Executive Vice President and Chief Operating Officer from October 2011 through September 2012 and as Corporate Executive Vice President and President, Oncology Systems from August 2005 through September 2011. Mr. Wilson served as Corporate Vice President and President, Oncology Systems from January 2005 to August 2005. Prior to joining the Company in January 2005, Mr. Wilson was Chief Executive Officer of the Healthcare-Information Technologies business in General Electric (a diversified technology and services company), from 2003 to 2005. During the previous 18 years, Mr. Wilson held various management positions within General Electric. Mr. Wilson holds a B.A. degree in English from Brigham Young University and an M.B.A. degree from Dartmouth's Amos Tuck School of Business. Mr. Wilson served on the board of directors of Saba Software, Inc. (an e-learning software provider) from August 2006 to March 2015 and as the lead independent director of that board from August 2011 to March 2013. Mr. Wilson was appointed to our Board of Directors effective September 29, 2012.

Elisha W. Finney was appointed Executive Vice President, Finance, in addition to being Chief Financial Officer, in February 2012. Ms. Finney served as Corporate Senior Vice President and Chief Financial Officer from January 2005 through January 2012 and as Corporate Vice President and Chief Financial Officer from April 1999 to January 2005. Ms. Finney has held various other positions, including Treasurer, during her 28 years with the Company. Ms. Finney holds a B.B.A. degree in risk management and insurance from the University of Georgia and an M.B.A. degree from Golden Gate University in San Francisco. Ms. Finney served on the board of Thoratec (a supplier of medical devices for circulatory support and vascular graft applications) from July 2007 to May 2013. She also served on the board of Altera Corporation (a supplier of custom logic solutions) from August 2011 to December 2015 when it was acquired by Intel. She joined the board of ICU Medical (a supplier of medical devices relating to IV therapy) in January 2016. In October 2016, Ms. Finney announced her intention to retire in fiscal year 2017.

Kolleen T. Kennedy was appointed Executive Vice President and President, Oncology Systems effective September 2014, and was Senior Vice President and President, Oncology Systems from October 2011 to September 2014. From January 2006 through September 2011, Ms. Kennedy served as Vice President, Oncology Systems Customer Service and Support. Prior to that, Ms. Kennedy was the Company's Vice President, Oncology Systems Marketing, Product Management and Engineering from September 2004 to January 2006. Prior to becoming Vice President, Ms. Kennedy served in various marketing management positions since she joined the Company in 1997. Ms. Kennedy holds a B.S. degree in Radiation Oncology and a B.S. degree in Psychology, both from Wayne State University, as well as an M.S. in Medical Physics from the University of Colorado.

John W. Kuo was appointed Senior Vice President, in addition to being General Counsel and Corporate Secretary, in February 2012. Prior to that, he served as Corporate Vice President and General Counsel from July 2005 through January 2012 and as Corporate Secretary since February 2005. Mr. Kuo joined the Company as Senior Corporate Counsel in March 2003 and became Associate General Counsel in March 2004. Prior to joining the Company, Mr. Kuo was General Counsel and Secretary at BroadVision, Inc. (an e-commerce software provider) and held senior legal positions at 3Com Corporation (a networking equipment provider). Mr. Kuo has previously been with the law

firms of Gray Cary Ware & Freidenrich (now DLA Piper) and Fulbright & Jaworski. Mr. Kuo holds a B.A. degree from Cornell University and a J.D. degree from Boalt Hall School of Law at the University of California at Berkeley.

Sunny S. Sanyal was appointed Senior Vice President and President, Imaging Components Business in February 2014. From August 2010 to January 2014, Mr. Sanyal served as the Chief Executive Officer of T-System Inc. (an information technology solutions and services provider). Mr. Sanyal worked for McKesson Corporation (a healthcare services and information technology company) as the Chief Operating Officer of McKesson Provider Technologies from December 2006 to July 2010 and as the Group President of McKesson's Clinical Information Systems division from April 2004 to December 2006. Previously, he held various management positions with GE Healthcare, Accenture and IDX Systems Corporation. Mr. Sanyal holds an M.B.A. degree from Harvard Business School, an M.S. degree in industrial engineering from Louisiana State University, and a B.E. degree in electrical engineering from the University of Bombay.

Clarence R. Verhoef was appointed Senior Vice President, Finance and Corporate Controller in August 2012. From May 2012 to August 2012, Mr. Verhoef served as the Company's Vice President and Operations Controller, and from September 2006 to May 2012, he served as the Controller for the Company's X-Ray Products business. Prior to joining the Company, from 2003 to September 2006, Mr. Verhoef served as the Chief Financial Officer of Techniscan Medical Systems Inc. (a developer of ultrasound technology), and prior to that held various finance management positions with GE Healthcare and other medical imaging equipment companies. Mr. Verhoef holds a B.S. degree in Finance from the University of Utah.

Item 1A. Risk Factors

The following risk factors and other information included in this Annual Report on Form 10-K should be carefully considered. Although the risk factors described below are the ones management deems significant, additional risks and uncertainties not presently known to us or that we presently deem less significant may also adversely affect our business operations. If any of the following risks or additional risks and uncertainties actually occur, our business, operating results, and financial condition could be adversely affected.

OUR SUCCESS DEPENDS ON THE SUCCESSFUL DEVELOPMENT, INTRODUCTION AND COMMERCIALIZATION OF NEW GENERATIONS OF PRODUCTS AND ENHANCEMENTS TO OR SIMPLIFICATIONS OF EXISTING PRODUCT LINES

The markets in which we operate are characterized by rapid change and technological innovation. Our Oncology Systems products often have long development and government approval cycles, so we must anticipate changes in the marketplace, in technology and in customer demands. Our success depends on the successful development, introduction and commercialization of new generations of products (including linear accelerators, accessories, treatment systems and software products) and enhancements to and/or simplification of existing product lines. Our Oncology Systems products, including products such as EDGE and TrueBeam, are technologically complex and must keep pace with, if not be superior to, the products of our competitors in order to remain competitive. We are also expanding our software product lines and investing in the development of cloud and software-as-a-service ("SaaS") solutions. The development and introduction of new software platforms and software delivery models, as well as different revenue models, can be highly complex and uncertain, in relation to both our ability to develop and implement such platforms or models and in our customers' acceptance of such platforms or models.

Our Imaging Components business, which sells primarily to a small number of imaging system OEM customers which use our products in their medical diagnostic, security and industrial imaging systems, must continually introduce new products at competitive costs while also improving existing products with higher quality, lower costs and improved feature sets. Because this business competes in very price sensitive markets with other market players which are much larger and may have "in-house" supply of competing components, our ability to anticipate our customers' demands, innovate and introduce new products at a competitive cost and to improve the quality, cost and features of our existing products is extremely critical to our success in this business. Our failure to do so can and has resulted in loss of customers and adverse impacts on our financial performance. With a strong U.S. Dollar, our ability to meet our international customers' pricing expectations is particularly challenged and can result in erosion of product margin and market share.

We are investing in the growth of our Particle Therapy business, and expect that we will need to invest more to develop and commercialize new products and technology for this business. Accordingly, our products may require significant planning, design, development and testing, as well as significant capital commitments, involvement of senior management and other investments on our part. In addition, because of the large footprint and high price of many proton therapy systems, including ours, there is increasing demand for development of a smaller, more compact proton therapy system. Other companies currently offer smaller, less expensive proton therapy systems, and our ability to compete with these companies may depend on our ability to timely develop new technologies to reduce the size and price of our system or provide additional features and functionality that our competitors do not.

We may need to spend more time and money than anticipated to develop and introduce new products or product enhancements and, even if new products and product enhancements are successful they may not be sufficiently profitable such that we are able to recover all or a meaningful part of our investment. Once introduced, new products may adversely impact orders and sales of our existing products, or make them less desirable or even obsolete, which could adversely impact our revenues and operating results. In addition, certain costs, including installation and warranty costs, associated with new products may be proportionately greater than the costs associated with other products, and may therefore disproportionately adversely affect our gross and operating margins. If we are unable to lower these costs over time, our operating results could be adversely affected. Compliance with regulations, competitive alternatives, and shifting market preferences may also impact our success with new products or enhancements.

Our ability to successfully develop and introduce new products and product enhancements and simplifications, and the revenues and costs associated with these efforts, depends on our ability to:

- properly identify customer needs or long-term customer demands;
- prove the feasibility of new products;
- limit the time required from proof of feasibility to routine production;
- timely and efficiently comply with internal quality assurance systems and processes;
- limit the timing and cost of regulatory approvals;
- accurately predict and control costs associated with inventory overruns or shortages caused by phase-in of new products and phase-out of old products;
- price our products competitively and profitably;
- manufacture, deliver and install our products in sufficient volumes on time, and accurately predict and control costs associated with manufacturing, installation, warranty and maintenance of the products;
- appropriately manage our supply chain;
- manage customer acceptance and payment for products;
- manage customer demands for retrofits of both new and old products; and
- anticipate, respond to and compete successfully with competitors.

Furthermore, we cannot be sure that we will be able to successfully develop, manufacture or introduce new products, treatment systems or enhancements, the roll-out of which involves compliance with complex quality assurance processes, including the Quality System Regulation (“QSR”) of the FDA. Failure to complete these processes on a timely and efficient basis could result in delays that could affect our ability to attract or retain customers, or could cause customers to delay or cancel orders, causing our revenues and operating results to suffer.

New products generally take longer to install than well-established products. Because a portion of a product’s revenue is generally tied to installation and acceptance of the product, our recognition of revenue associated with new products may be deferred longer than expected. In addition, even if we succeed in our product introductions, potential customers may decide not to upgrade their equipment, or customers may delay delivery of some of our more sophisticated products because of the longer preparation and renovation of treatment rooms required. As a result, our revenues and other financial results could be adversely affected.

MORE THAN HALF OF OUR REVENUES ARE INTERNATIONAL, AND ECONOMIC, POLITICAL AND OTHER RISKS ASSOCIATED WITH INTERNATIONAL SALES AND OPERATIONS COULD ADVERSELY AFFECT OUR SALES OR MAKE THEM LESS PREDICTABLE

We conduct business globally. Our international revenues accounted for approximately 57%, 54% and 57% of our total revenues during fiscal years 2016, 2015 and 2014, respectively. Correspondingly, we must provide significant service and support globally. We intend to continue to expand our presence in international markets and expect to expend significant resources in doing so. For example, we have aligned our resources to support sales and marketing efforts in emerging markets. We cannot be sure, however, that we will be able to meet our sales, service and support objectives or obligations in these international markets, or recover our investments. Our future results could be adversely affected by a variety of factors, including:

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- currency fluctuations, and in particular the strength of the U.S. Dollar since the end of our fiscal year 2014 relative to many currencies, which has adversely affected our financial results and caused some customers to delay purchasing decisions or move to in-sourcing supply or migrate to lower cost alternatives or ask for additional discounts;
- the lower sales prices and gross margins usually associated with sales of our products in international regions, and in emerging markets in particular;
- the longer payment cycles associated with many foreign customers;
- difficulties in interpreting or enforcing agreements and collecting receivables through many foreign country's legal systems;
- unstable regional political and economic conditions or changes in restrictions on trade between the United States and other countries, such as may result from the outcome of the 2016 U.S. presidential election;
- changes in the political, regulatory, safety or economic conditions in a country or region, including as a result of the United Kingdom's June 2016 vote to leave the European Union ("Brexit");
- the imposition by governments of additional taxes, tariffs, global economic sanctions programs (such as the Russia-Ukraine sanctions) or other restrictions on foreign trade;
- the typically longer periods from placement of orders to revenue recognition in international regions;
- any inability to obtain required export or import licenses or approvals;
- failure to comply with export laws and requirements, which may result in civil or criminal penalties and restrictions on our ability to export our products, particularly our industrial linear accelerator products;
- failure to obtain proper business licenses or other documentation, or to otherwise comply with local laws and requirements regarding marketing, sales, service or any other business we conduct in a foreign jurisdiction, which may result in civil or criminal penalties and restrictions on our ability to conduct business in that jurisdiction; and
- the possibility that it may be more difficult to protect our intellectual property in foreign countries.

Although our orders and sales fluctuate from period to period, in recent years our international sales have represented a larger share of our business. The more we depend on international sales, the more vulnerable we become to these factors.

As of September 30, 2016, approximately 95% of our cash and cash equivalents were held abroad. If these funds were repatriated to the United States, a portion of this amount could be subject to additional taxation and our overall tax rate and our results of operations could suffer.

Our effective tax rate is impacted by tax laws in both the United States and in the countries in which our international subsidiaries do business. Earnings from our international regions are generally taxed at rates lower than U.S. rates. A change in the percentage of our total earnings from outside the United States, a change in the mix of our earnings in particular international tax jurisdictions, or a change in currency exchange rates, could cause our effective tax rate to increase or decrease. Also, we are not currently taxed in the United States on certain undistributed earnings of certain foreign subsidiaries. These earnings could become subject to incremental foreign withholding or U.S. federal and state taxes should they either be deemed to be or actually are remitted to the United States, in which case our financial results would be adversely affected. In addition, changes in the valuation of our deferred tax assets or liabilities, changes in tax laws or rates, changes in the interpretation of tax laws or other changes beyond our control could adversely affect our financial position and results of operations.

THE PROPOSED SEPARATION OF OUR IMAGING COMPONENTS BUSINESS INTO AN INDEPENDENT, PUBLICLY-TRADED COMPANY MAY NOT BE COMPLETED ON THE CURRENTLY CONTEMPLATED TIMELINE OR TERMS, OR AT ALL, MAY BE MORE EXPENSIVE THAN ANTICIPATED AND MAY NOT ACHIEVE THE INTENDED BENEFITS.

In May 2016, we announced our intention to separate our Imaging Components business into an independent, publicly-traded company, named Varex Imaging Corporation ("Varex"). The separation is subject to final board approval of the terms of the separation, receipt of one or more opinions with respect to certain U.S. federal income tax matters relating to the separation, the SEC declaring the effectiveness of the registration statement, market and certain other conditions, and there can be no assurance as to whether or when the separation will occur. Unforeseen developments, including possible delays in obtaining various tax and regulatory approvals or clearances, could delay or prevent the proposed separation or cause the proposed separation to occur on terms or conditions that are less

favorable and/or different than expected. We expect the process of completing the proposed separation will be time-consuming and involve significant costs and expenses, which may be

significantly higher than what we currently anticipate, may increase in the event that the timing of the separation is delayed and may not yield a benefit if the separation is not completed. Executing the proposed separation, as well as performing Varian's obligations under a transition services agreement to be entered into with Varex for a period of time after the separation, will require significant time and attention from our senior management and employees, which could adversely affect our business, financial results and results of operations.

Separating the businesses may also result in dis-synergies post-separation that could negatively impact the balance sheet, income statement and cash flows of each business. In addition, upon completion of the separation, Varex will be the sole source of supply of X-ray tubes and flat panels used in certain of our products, such as our On-Board Imager. Any disruption to or reduction in the supply of these components could result in delays to our product deliveries, which could adversely affect our business and financial results and could damage our customer relationships. Moreover, we may not realize some or all of the anticipated strategic, financial, operational, marketing or other benefits from the separation. As independent, publicly-traded companies, Varian and Varex would each be smaller, less diversified companies with narrower business focuses and may be more vulnerable to changing market conditions, which could materially and adversely affect their respective businesses, financial condition and results of operations and lead to increased volatility in the price of Varian and/or Varex common stock. In addition, there can be no assurance that the combined value of the common stock of the two publicly-traded companies would be equal to or greater than what the value of our common stock would have been had the proposed separation not occurred.

We intend to obtain an opinion of outside counsel to the effect that the separation will qualify as a transaction that is generally tax-free to both Varian and its stockholders for U.S. federal income tax purposes under Sections 355 and 368(a)(1)(D) of the U.S. Internal Revenue Code of 1986, as amended. An opinion of outside counsel represents their legal judgment but is not binding on the Internal Revenue Service (the "IRS") or any court. Accordingly, there can be no assurance that the IRS will not challenge the conclusions reflected in the opinion or that a court would not sustain such a challenge.

OUR RESULTS HAVE BEEN AND MAY CONTINUE TO BE AFFECTED BY GLOBAL OR REGIONAL ECONOMIC INSTABILITY

The global economy has been impacted by a number of economic and political factors, including the current Russia-Ukraine sanctions. In many markets, these conditions have reduced capital equipment budgets, slowed decision-making, made financing for large equipment purchases more expensive and more time consuming to obtain, and made it difficult for our customers and our vendors to accurately forecast and plan future business activities. This, in turn, has caused our customers to be more cautious with, and to sometimes freeze, delay or dramatically reduce, purchases and capital project expenditures. Some countries have adopted and may in the future adopt austerity or stimulus programs that could positively or negatively affect our results from period to period, making it difficult for investors to compare our financial results from period to period. In addition, the outcome of the 2016 U.S. presidential election and the announcement of Brexit and the withdrawal of the United Kingdom from the European Union may also create global economic uncertainty, which may cause our customers to reduce their spending, which in turn, could adversely affect our business, financial condition, operating results and cash flows. An uncertain economic environment may also disrupt supply or affect our service business, as customers' constrained budgets may result in pricing pressure, extended warranty provisions and even cancellation of service contracts.

In addition, concerns over continued economic instability could make it more difficult for us to collect outstanding receivables. Historically, our business has felt the effects of market trends later than other sectors in the healthcare industry, such as diagnostic radiology, and we may experience the effects of any economic recovery later than others in the healthcare industry. A weak or deteriorating healthcare market would inevitably adversely affect our business, financial conditions and results of operations.

WE FACE SIGNIFICANT COSTS IN ORDER TO COMPLY WITH LAWS AND REGULATIONS APPLICABLE TO THE MANUFACTURE AND DISTRIBUTION OF OUR PRODUCTS, AND FAILURE OR DELAYS IN OBTAINING REGULATORY CLEARANCES OR APPROVALS, OR FAILURE TO COMPLY WITH APPLICABLE LAWS AND REGULATIONS COULD PREVENT US FROM DISTRIBUTING OUR PRODUCTS, REQUIRE US TO RECALL OUR PRODUCTS AND RESULT IN SIGNIFICANT PENALTIES

Our products and those of OEMs that incorporate our products are subject to extensive and rigorous government regulation in the United States. Compliance with these laws and regulations is expensive and time-consuming, and failure to comply with these laws and regulations could adversely affect our business. Furthermore, public media reports on misadministrations of radiotherapy in patients and focus on the role of the FDA in regulating medical devices has led to increased scrutiny of medical device companies and an increased likelihood of enforcement actions.

U.S. laws governing marketing a medical device. In the United States, as a manufacturer and seller of medical devices and devices emitting radiation or utilizing radioactive by-product material, we and some of our suppliers and distributors are subject to extensive regulation by federal governmental authorities, such as the FDA, the Nuclear Regulatory Commission ("NRC") and state and local regulatory agencies, such as the State of California, to ensure the devices are safe and effective and comply with laws governing products which emit, produce or control radiation. These regulations govern, among other things, the design, development, testing, manufacturing, packaging, labeling, distribution, import/export, sale and marketing and disposal of our products.

Unless an exception applies, the FDA requires that the manufacturer of a new medical device or a new indication for use of, or other significant change in, an existing currently marketed medical device obtain either 510(k) pre-market notification clearance or pre-market approval ("PMA") before it can market or sell those products in the United States. Modifications or enhancements to a product that could significantly affect its safety or effectiveness, or that would constitute a major change in the intended use of the device, technology, materials, labeling, packaging, or manufacturing process also require a new 510(k) clearance. Although manufacturers make the initial determination whether a change to a cleared device requires a new 510(k) clearance, we cannot assure you that the FDA will agree with our decisions not to seek additional approvals or clearances for particular modifications to our products or that we will be successful in obtaining new 510(k) clearances for modifications. Obtaining clearances or approvals is time-consuming, expensive and uncertain, and the PMA process is more complex than the 510(k) clearance process. We may not be able to obtain the necessary clearances or approvals or may be unduly delayed in doing so, which could harm our business. Furthermore, even if we are granted regulatory clearances or approvals, they may include significant limitations on the indicated uses of the product, which may limit the market for the product. If we were unable to obtain required FDA clearance or approval for a product or unduly delayed in doing so, or the uses of that product were limited, our business could suffer. In the past, our devices have generally been subject to 510(k) clearance or exempt from 510(k) clearance. However, there are some in the regulatory field who believe that certain medical devices should be required to use the PMA approval process. If we were required to use the PMA process for future products or product modifications, it could delay or prevent release of the proposed products or modifications, which could harm our business.

Further, as we enter new businesses or pursue new business opportunities, such as radiosurgery and opportunities that require clinical trials, we become subject to additional laws, rules and regulations, including FDA and foreign rules and regulations that are applicable to the clinical trial process and protection of study subjects. Becoming familiar with and implementing the infrastructure necessary to comply with these laws, rules and regulations is costly. In addition, failure to comply with these laws, rules and regulations could delay the introduction of new products and could adversely affect our business.

Quality systems. Our manufacturing operations for medical devices, and those of our third-party manufacturers, are required to comply with the FDA's QSR, as well as other federal and state regulations for medical devices and radiation emitting products. The FDA makes announced and unannounced periodic and on-going inspections of medical device manufacturers to determine compliance with QSR and in connection with these inspections issues reports, known as Form FDA 483 reports when the FDA believes the manufacturer has failed to comply with applicable regulations and/or procedures. If observations from the FDA issued on Form FDA 483 reports are not addressed and/or corrective action is not taken in a timely manner and to the FDA's satisfaction, the FDA may issue a Warning Letter and/or proceed directly to other forms of enforcement action. Similarly, if a Warning Letter were issued, prompt corrective action to come into compliance would be required. Failure to respond timely to Form FDA 483 observations, a Warning Letter or other notice of noncompliance and to promptly come into compliance could result in the FDA bringing enforcement action against us, which could include the total shutdown of our production facilities, denial of importation rights to the U.S. for products manufactured in overseas locations, adverse publicity and criminal and civil fines. The expense and costs of any corrective actions that we may take, which may include products recalls, correction and removal of products from customer sites and/or changes to our product manufacturing and quality systems, could adversely impact our financial results and may also divert management resources, attention and time. Additionally, if a Warning Letter were issued, customers could delay purchasing decisions or cancel orders, and we could face increased pressure from our competitors who could use the Warning Letter against us in

competitive sales situations, either of which could adversely affect our reputation, business and stock price.

In addition, we are required to timely file various reports with the FDA, including reports required by the medical device reporting regulations ("MDRs"), that require that we report to regulatory authorities if our devices may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if the malfunction were to recur. If these reports are not filed on a timely basis, regulators may impose sanctions and sales of our products may suffer, and we may be subject to product liability or regulatory enforcement actions, all of which could harm our business.

If we initiate a correction or removal of a device to reduce a risk to health posed by the device, we would be required to submit a publicly available Correction and Removal report to the FDA and in many cases, similar reports to other regulatory agencies.

This report could be classified by the FDA as a device recall which could lead to increased scrutiny by the FDA, other international regulatory agencies and our customers regarding the quality and safety of our devices. Furthermore, the submission of these reports has been and could be used against us by competitors in competitive situations and cause customers to delay purchase decisions, cancel orders or adversely affect our reputation.

Our medical devices utilizing radioactive material are subject to the NRC clearance and approval requirements, and the manufacture and sale of these products are subject to extensive federal and state regulation that varies from state to state and among regions. Our manufacture, distribution, installation and service (and decommissioning and removal) of medical devices utilizing radioactive material or emitting radiation also requires us to obtain a number of licenses and certifications for these devices and materials. Service of these products must also be in accordance with a specific radioactive materials license. Obtaining licenses and certifications may be time consuming, expensive and uncertain.

In addition, we are subject to a variety of environmental laws regulating our manufacturing operations and the handling, storage, transport and disposal of hazardous materials, and which impose liability for the cleanup of any contamination from these materials. In particular, the handling and disposal of radioactive materials resulting from the manufacture, use or disposal of our products may impose significant costs and requirements. Disposal sites for the lawful disposal of materials generated by the manufacture, use or decommissioning of our products may no longer accept these materials in the future, or may accept them on unfavorable terms.

The FDA and the FTC also regulate advertising and promotion of our products to ensure that the claims we make are consistent with our regulatory clearances, that there is adequate and reasonable scientific data to substantiate the claims and that our promotional labeling and advertising is neither false nor misleading in any respect. If the FDA or FTC determines that any of our advertising or promotional claims are misleading, not substantiated or not permissible, we may be subject to enforcement actions, including Warning Letters, and may be required to revise our promotional claims and make other corrections or restitutions.

If we or any of our suppliers, distributors, agents or customers fail to comply with FDA, FTC and other applicable U.S. regulatory requirements or are perceived to potentially have failed to comply, we may face:

- adverse publicity affecting both us and our customers;
- increased pressures from our competitors;
- investigations by governmental authorities or Warning Letters;
- fines, injunctions, and civil penalties;
- partial suspensions or total shutdown of production facilities, or the imposition of operating restrictions;
- increased difficulty in obtaining required FDA clearances or approvals;
- losses of clearances or approvals already granted;
- seizures or recalls of our products or those of our customers;
- delays in purchasing decisions by customers or cancellation of existing orders;
- the inability to sell our products;
- difficulty in obtaining product liability or operating insurance at a reasonable cost, or at all; and
- civil fines and criminal prosecutions.

Other applicable U.S. regulations. As a participant in the healthcare industry, we are also subject to extensive laws and regulations protecting the privacy and integrity of patient medical information that we receive, including the HIPAA, “fraud and abuse” laws and regulations, including physician self-referral prohibitions, and false claims laws. From time to time, these laws and regulations may be revised or interpreted in ways that could make it more difficult for our customers to conduct their businesses, such as recent proposed revisions to the laws prohibiting physician self-referrals, and such revisions could have an adverse effect on the demand for our products, and therefore our business and results of operations. We also must comply with numerous federal, state and local laws of more general applicability relating to such matters as safe working conditions, manufacturing practices and fire hazard control.

The laws and regulations and their enforcement are constantly undergoing change, and we cannot predict what effect, if any, changes to these laws and regulations may have on our business. For example, national and state laws regulate privacy and may regulate our use of data. Furthermore, HIPAA was amended by the HITECH Act to provide that business associates who have access to patient health information provided by hospitals and healthcare providers are now directly subject to HIPAA, including the new enforcement scheme and inspection requirements. Moreover, there

has been a trend in recent years toward

more stringent regulation and enforcement of requirements applicable to medical device manufacturers who receive or have access to patient health information.

Government regulation also may cause considerable delay or even prevent the marketing and full commercialization of future products or services that we may develop, and/or may impose costly requirements on our business. Insurance coverage is not commercially available for violations of law, including the fines, penalties or investigatory costs that we may incur as the consequence of regulatory violations; consequently, we do not have insurance that would cover this type of liability.

OUR RESULTS MAY BE IMPACTED BY CHANGES IN FOREIGN CURRENCY EXCHANGE RATES

Because our business is global and payments are generally made in local currency, fluctuations in foreign currency exchange rates can impact our results by affecting product demand, or our revenues and expenses, and/or the profitability in U.S. Dollars of products and services that we sell in foreign markets. For example, since the fourth quarter of fiscal year 2014, the U.S. Dollar has strengthened significantly against the Euro and certain foreign currencies, which adversely impacted our financial results in fiscal year 2015 and in the first half of fiscal year 2016. In addition, Brexit caused significant volatility in currency exchange rates that resulted in the strengthening of the U.S. Dollar against foreign currencies in which we conduct business. A strong U.S. Dollar relative to other currencies may adversely affect our operating results.

While we use hedging strategies to help offset the effect of fluctuations in foreign currency exchange rates, the protection these strategies provide is affected by the timing of transactions, the effectiveness of the hedges, the number of transactions that are hedged and forecast accuracy. If our hedging strategies do not offset these fluctuations, our revenues, margins and other operating results may be adversely impacted. Furthermore, movements in foreign currency exchange rates could impact our financial results positively or negatively in one period and not in another, making it more difficult to compare our financial results from period to period.

In addition, our hedging program is designed to hedge currency movements on a relatively short-term basis - typically up to the next twelve-month period. Therefore, we are exposed to currency fluctuations over the longer term.

Long-term movements in foreign currency exchange rates can also affect the competitiveness of our products in the local currencies of our international customers. A substantial portion of our international sales are priced in local currencies, although our cost structure is weighted towards the U.S. Dollar. The volatility of the U.S. Dollar that we have experienced over the last several years, and in particular the strengthening of the U.S. Dollar since the fourth quarter of fiscal year 2014, has affected the competitiveness of our pricing against our foreign competitors, some of which may have cost structures based in other currencies, either helping or hindering our international order and revenue growth, thereby affecting our overall financial performance and results. In addition, a significant portion of our Imaging Component customers are outside the United States and products in this business are generally priced in U.S. Dollars. As a result, the demand for Imaging Components products has been negatively impacted by pricing pressures resulting from the strengthening U.S. Dollar. The negative impact of foreign currency exchange rates has caused some customers in our Imaging Components business to delay purchasing decisions or move to in-sourcing supply or migrate to lower cost alternatives or ask for additional discounts. We expect that a strong U.S. Dollar will continue to negatively impact demand and pricing for Imaging Component products. Even if the U.S. Dollar weakens, these customers may continue using alternative sources and demand for our products may not increase.

Changes in monetary or other policies here and abroad, including as a result of economic and or political instability, or in reaction thereto, would also likely affect foreign currency exchange rates. Furthermore, in the event that one or more European countries were to replace the Euro with another currency, our sales into these countries, or into Europe generally, would likely be adversely affected until such time as stable exchange rates are established.

DISRUPTION OF CRITICAL INFORMATION SYSTEMS OR MATERIAL BREACHES IN THE SECURITY OF OUR PRODUCTS MAY ADVERSELY AFFECT OUR BUSINESS AND CUSTOMER RELATIONS

Information technology helps us operate efficiently, interface with and support our customers, maintain financial accuracy and efficiency, and produce our financial statements. There is an increasing threat of information security attacks that pose risk to companies, including Varian. Because the techniques used to obtain unauthorized access, or to sabotage systems, change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. If we do not allocate and

effectively manage the resources necessary to build and sustain the proper technology infrastructure, we could be subject to, among other things, transaction errors, processing inefficiencies, the loss of customers, business disruptions, or the loss of or damage to intellectual property through a security breach. Such security breaches could expose us to a risk of loss of information, litigation and possible liability to employees, customers and regulatory authorities. If our data management systems do not effectively collect, secure, store, process and report relevant data for the operation of our business, whether due to equipment malfunction or constraints, software

deficiencies, or human error, our ability to effectively plan, forecast and execute our business plan and comply with applicable laws and regulations will be impaired, perhaps materially. Any such impairment could materially and adversely affect our financial condition, results of operations, cash flows and the timeliness with which we report our operating results internally and externally.

Moreover, we manufacture and sell hardware products that rely upon software systems to operate properly and software that deliver treatment instructions and store confidential patient information, and both types of products often are connected to and reside within our customers' information technology infrastructures. While we have implemented security measures to protect both our hardware and software products from unauthorized access, these measures may not be effective in fully securing these products, particularly since techniques used to obtain unauthorized access, or to sabotage systems, change frequently and generally are not recognized until launched against a target. Additionally, we are developing and offering cloud and SaaS software products which reside upon and are hosted by third party providers. A security breach, whether of our products, of our customers' network security and systems or of third party hosting services could disrupt treatments occurring on our products, disrupt access to our customers' stored information, such as patient treatment delivery instructions, and could lead to the loss of, damage to or public disclosure of our customers' stored information, including patient health information. Such an event could have serious negative consequences, including possible patient injury, regulatory action, fines, penalties and damages, reduced demand for our solutions, an unwillingness of our customers to use our solutions, harm to our reputation and brand, and time-consuming and expensive litigation, any of which could have an adverse effect on our financial results. If we were to experience a significant security breach of our information systems or data, the costs associated with the investigation, remediation and potential notification of the breach to customers and counter-parties could be material, and we may not have sufficient insurance to compensate us for those costs. In addition, if a material claim is successfully brought against us relating to a self-insured liability, we may have to pay substantial damages, in addition to any costs related to our defense, which could have a material adverse effect on our financial position and results of operations.

COMPLIANCE WITH FOREIGN LAWS AND REGULATIONS APPLICABLE TO THE MANUFACTURE AND DISTRIBUTION OF OUR PRODUCTS MAY BE COSTLY, AND FAILURE TO COMPLY MAY RESULT IN SIGNIFICANT PENALTIES

Regulatory requirements affecting our operations and sales outside the United States vary from country to country, often differing significantly from those in the United States. In general, outside the United States, our products are regulated as medical devices by foreign governmental agencies similar to the FDA.

Marketing a medical device internationally. In order for us to market our products internationally, we must obtain clearances or approvals for products and product modifications. These processes (including for example in the European Union ("EU"), the European Economic Area ("EEA"), Switzerland, China, Japan and Canada) can be time consuming, expensive and uncertain, which can delay our ability to market products in those countries. Delays in receipt of or failure to receive regulatory approvals, the inclusion of significant limitations on the indicated uses of a product, the loss of previously obtained approvals or failure to comply with existing or future regulatory requirements could restrict or prevent us from doing business in a country or subject us to a variety of enforcement actions and civil or criminal penalties, which would adversely affect our business.

Within the EEA, we must affix a CE mark, a European marking of conformity that indicates that a product meets the essential requirements of the Medical Device Directive. This conformity to the Medical Device Directive is done through self-declaration and is verified by an independent certification body, called a "Notified Body." Once the CE mark is affixed, the Notified Body will regularly audit us to ensure that we remain in compliance with the applicable European laws and Medical Device Directive. By affixing the CE mark marking to our product, we are certifying that our products comply with the laws and regulations required by the EEA countries, thereby allowing the free movement of our products within these countries and others that accept CE mark standards. If we cannot support our performance claims and demonstrate compliance with the applicable European laws and Medical Device Directive, we would lose our right to affix the CE mark to our products, which would prevent us from selling our products within the EU/EEA/Switzerland territory and in other countries that recognize the CE mark. In September 2012, the European Commission adopted a Proposal for a Regulation of the European Parliament and of the Council on medical

devices and a Proposal for a Regulation of the European Parliament and of the Council on in vitro diagnostic medical devices which, once adopted by the European Parliament and by the Council, would replace the existing three medical devices directives and would have legislative effect without having to be implemented by the Member States. The new draft was published in August 2016 and the expected date for publication is April 2017, starting a three year transition period. The new proposal imposes stricter requirements for the marketing and sale of medical devices and grants Notified Bodies increased post-market surveillance authority. We may be subject to risks associated with additional testing, modification, certification or amendment of our existing market authorizations, or we may be required to modify products already installed at our customers' facilities in order to comply with the official interpretations of these revised regulations.

In addition, we are required to timely file various reports with international regulatory authorities, including reports required by international adverse event reporting regulations, that require that we report to regulatory authorities if our devices may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if the malfunction were to recur. If these reports are not timely filed, regulators may impose sanctions, including temporarily suspending our market authorizations or CE mark, and sales of our products may suffer, and we may be subject to product liability or regulatory enforcement actions, all of which could harm our business.

Further, as we enter new businesses or pursue new business opportunities internationally, such as opportunities that require clinical trials, we may become subject to additional laws, rules and regulations. Becoming familiar with and implementing the infrastructure necessary to comply with these laws, rules and regulations is costly. In addition, failure to comply with these laws, rules and regulations could delay the introduction of new products and could adversely affect our business.

Manufacturing and selling a device internationally. We are also subject to laws and regulations that apply to manufacturers of radiation emitting devices and products utilizing radioactive materials, as well as laws and regulations of general applicability relating to matters such as environmental protection, safe working conditions, manufacturing practices and other matters. These are often comparable to, if not more stringent than, the equivalent regulations in the United States. Sales overseas are also affected by regulation of matters such as product standards, packaging, labeling, environmental and product recycling requirements, import and export restrictions, tariffs, duties and taxes.

In some countries, we rely on our foreign distributors and agents to assist us in complying with foreign regulatory requirements, and we cannot be sure that they will always do so. If we or any of our suppliers, distributors, agents or customers fail to comply with applicable international regulatory requirements or are perceived to potentially have failed to comply, we may face:

- adverse publicity affecting both us and our customers;
- investigations by governmental authorities;
- fines, injunctions, civil penalties and criminal prosecutions;
- increased difficulty in obtaining required approvals in foreign countries;
- losses of clearances or approvals already granted;
- seizures or recalls of our products or those of our customers;
- delays in purchasing decisions by customers or cancellation of existing orders; and
- the inability to sell our products in or to import our products into such countries.

Other applicable international regulations. We are subject to laws and regulations in foreign countries covering data privacy and other protection of health and employee information. Particularly within the EU/EEA/Switzerland area, data protection legislation is comprehensive and complex and there has been a recent trend toward more stringent enforcement of requirements regarding protection and confidentiality of personal data. Data protection authorities from the different member states of the EU may interpret the legislation differently, which adds to this complexity, and data protection is a dynamic field where guidance is often revised. Fully understanding and implementing this legislation could be quite costly and timely, which could adversely affect our business. Additionally, in some instances, in order to fulfill the requirements of applicable U.S. laws, we may be faced with deciding whether to comply with EU/EEA/Switzerland data protection rules. Failure or partial failure to comply with data protection rules and regulations across the EU/EEA/Switzerland area could result in substantial monetary fines. New data protection legislation that entails substantial changes to the current legal framework, some stricter than before, some less strict, was enacted by the EU Commission in 2015.

We are also subject to international “fraud and abuse” laws and regulations, as well as false claims and misleading advertisement laws. From time to time, these laws and regulations may be revised or interpreted in ways that could make it more difficult for our customers to conduct their businesses, which could have an adverse effect on the demand for our products, and therefore our business and results of operations. The laws and regulations and their enforcement are constantly undergoing change, and we cannot predict what effect, if any, changes to these laws and regulations may have on our business.

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THE AFFORDABLE CARE ACT INCLUDES PROVISIONS THAT MAY ADVERSELY AFFECT OUR BUSINESS AND RESULTS OF OPERATIONS, INCLUDING AN EXCISE TAX ON THE SALES OF MOST MEDICAL DEVICES

On March 23, 2010, President Obama signed into law the Affordable Care Act. The Affordable Care Act could adversely impact the demand for our products and services, and therefore our financial position and results of operations, possibly materially.

Specifically, one of the components of the law is a 2.3% excise tax on sales of most medical devices, which include our Oncology Systems and VPT products, which took effect on January 1, 2013. This tax has had, and may in the future continue to have, a negative impact on our gross margin, but was suspended for 2016 and 2017.

In addition, discussions relating to the Affordable Care Act have included the possibility for bundled reimbursement payments and accountable care organizations ("ACOs"). ACOs and bundled payment programs were established by the Affordable Care Act to reward integrated, efficient care and allow providers to share in any savings they achieve through the coordination of care and meeting certain mandated quality standards. ACOs and the bundled payment programs have primarily focused on primary care. However, some customers appear to be developing new partnerships across clinical specialties to prepare for the possibility of operating in an ACO environment and bundled reimbursement payments. These and other elements of the Affordable Care Act, including comparative effectiveness research, an independent payment advisory board, payment system reforms (including shared savings pilots) and the reporting of certain payments by us to healthcare professionals and hospitals (the "Physician Payment Sunshine Act"), could meaningfully change the way healthcare is developed and delivered, and may materially impact numerous aspects of our business, including the demand and availability of our products, the reimbursement available for our products from governmental and third-party payors, and medical procedure volumes. We believe that growth of the radiation oncology market, which includes both traditional radiation therapy as well as proton therapy, in the United States is being adversely impacted as customers' decision-making processes are complicated by the uncertainties surrounding the implementation of the Affordable Care Act and reimbursement rates for radiotherapy and radiosurgery, and that this uncertainty will likely continue into the next fiscal year and could result in a high degree of variability of gross orders and revenues from quarter-to-quarter.

Various healthcare reform proposals have also emerged at the state level, and we are unable to predict which, if any of these proposals will be enacted. We are also unable to predict what effect ongoing uncertainty surrounding federal and state health reform proposals will have on our customer's purchasing decisions. However, an expansion in government's role in the U.S. healthcare industry may adversely affect our business, possibly materially. In addition, it is possible that changes in administration and policy, including the potential repeal of all or parts of the Affordable Care Act, resulting from the recent U.S. presidential election could result in additional proposals and/or changes to health care system legislation which could have a material adverse effect on our business. The full effect that a full or partial repeal of the Affordable Care Act would have on our business remains unclear at this time.

CHANGES TO RADIATION ONCOLOGY AND OTHER REIMBURSEMENTS AND CHANGES IN INSURANCE DEDUCTIBLES AND ADMINISTRATION MAY AFFECT DEMAND FOR OUR PRODUCTS

Sales of our healthcare products indirectly depend on whether adequate reimbursement is available to our customers from a variety of sources, such as government healthcare insurance programs, including the Medicare and Medicaid programs; private insurance plans; health maintenance organizations; and preferred provider organizations. In general, employers and third-party payors in the United States have become increasingly cost-conscious, with higher deductibles imposed or encouraged in many medical plans. The imposition of higher deductibles tends to inhibit individuals from seeking the same level of medical treatments as they might seek if the costs were lower, particularly in the medical diagnostic portion of our business. Third-party payors have also increased utilization controls related to the use of our products by healthcare providers.

Furthermore, there is no uniform policy on reimbursement among third-party payors, and we cannot be sure that third-party payors will reimburse our customers for procedures using our products at a level that will enable us to achieve or maintain adequate sales and price levels for our products. Without adequate support from third-party payors, the market for our products may be limited.

Once Medicare has made a decision to provide reimbursement for a given treatment, these reimbursement rates are generally reviewed and adjusted by Medicare annually. Private third-party payors, although independent from Medicare, sometimes use portions of Medicare reimbursement policies and payment amounts in making their own reimbursement decisions. As a result, decisions by the Centers for Medicare and Medicaid Services ("CMS") to reimburse for a treatment, or changes to Medicare's reimbursement policies or reductions in payment amounts with respect to a treatment sometimes extend to third-party payor reimbursement policies and amounts for that treatment. We have seen our customers' decision-making process complicated by

the uncertainty surrounding Medicare reimbursement rates for radiotherapy and radiosurgery in the United States. From time to time, CMS and third-party payors may review and modify the factors upon which they rely to determine appropriate levels of reimbursement for cancer treatments. For example, CMS and third-party payors have begun to focus on the comparative effectiveness of radiation therapy versus other methods of cancer treatment, including surgery, and could modify reimbursement rates based on the results of comparative effectiveness studies. In addition, discussions relating to the Affordable Care Act have included the possibility for bundled reimbursement payments and ACOs. Any significant cuts in reimbursement rates or changes in reimbursement methodology or administration for radiotherapy, radiosurgery, proton therapy or brachytherapy, or concerns or proposals regarding further cuts or changes in methodology or administration, could further increase uncertainty, influence our customers' decisions, reduce demand for our products, cause customers to cancel orders and have a material adverse effect on results of operations, financial position and stock price.

In April of 2015, the Medicare Access and CHIP Reauthorization Act of 2015 ("MACRA") was signed into law, which made numerous changes to Medicare, Medicaid, and other healthcare related programs. These changes include new systems for establishing the annual updates to payment rates for physicians' services in Medicare. MACRA is effective beginning January 1, 2017. Our business may be significantly affected by MACRA and any changes in reimbursement policies and other legislative initiatives aimed at or having the effect of reducing healthcare costs associated with Medicare and other government healthcare programs.

Foreign governments also have their own healthcare reimbursement systems and there can be no assurance that adequate reimbursement will be made available with respect to our products under any foreign reimbursement system.

WE ARE SUBJECT TO FEDERAL, STATE AND FOREIGN LAWS GOVERNING OUR BUSINESS PRACTICES WHICH, IF VIOLATED, COULD RESULT IN SUBSTANTIAL PENALTIES. ADDITIONALLY, CHALLENGES TO OR INVESTIGATION INTO OUR PRACTICES COULD CAUSE ADVERSE PUBLICITY AND BE COSTLY TO RESPOND TO AND THUS COULD HARM OUR BUSINESS

Laws and ethical rules governing interactions with healthcare providers. The Medicare and Medicaid "anti-kickback" laws, and similar state laws, prohibit payments or other remuneration that is intended to induce hospitals, physicians or others either to refer patients or to purchase, lease or order, or arrange for or recommend the purchase, lease or order of healthcare products or services for which payment may be made under federal and state healthcare programs, such as Medicare and Medicaid. These laws affect our sales, marketing and other promotional activities by limiting the kinds of financial arrangements we may have with hospitals, physicians or other potential purchasers of our products. They particularly impact how we structure our sales offerings, including discount practices, customer support, education and training programs, physician consulting, research grants and other service arrangements. These laws are broadly written, and it is often difficult to determine precisely how these laws will be applied to specific circumstances.

Federal and state "false claims" laws generally prohibit knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid or other government payors that are false or fraudulent, or for items or services that were not provided as claimed. Although we do not submit claims directly to payors, manufacturers can be, and have been, held liable under these laws if they are deemed to "cause" the submission of false or fraudulent claims by providing inaccurate billing or coding information to customers, or through certain other activities, including promoting products for uses not approved or cleared by the FDA, which is called off-label promotion. Violating "anti-kickback" and "false claims" laws can result in civil and criminal penalties, which can be substantial, and potential mandatory or discretionary exclusion from healthcare programs for noncompliance. Even an unsuccessful challenge or investigation into our practices could cause adverse publicity, and be costly to defend, and thus could harm our business and results of operations. Additionally, several recently enacted state and federal laws, including laws in Massachusetts and Vermont, and the federal Physician Payment Sunshine Act, now require, among other things, extensive tracking and maintenance of databases regarding the disclosure of equity ownership and payments to physicians, healthcare providers and hospitals. These laws require us to implement the necessary and costly infrastructure to track and report certain payments to healthcare providers. Failure to comply with these new tracking and reporting laws could subject us to significant civil monetary penalties.

We are subject to similar laws in foreign countries where we conduct business. For example, within the EU, the control of unlawful marketing activities is a matter of national law in each of the member states. The member states of the EU closely monitor perceived unlawful marketing activity by companies. We could face civil, criminal and administrative sanctions if any member state determines that we have breached our obligations under its national laws. Industry associations also closely monitor the activities of member companies. If these organizations or authorities name us as having breached our obligations under their regulations, rules or standards, our reputation would suffer and our business and financial condition could be adversely affected.

Anti-corruption laws and regulations. We are also subject to the U.S. Foreign Corrupt Practices Act and anti-corruption laws, and similar laws in foreign countries, such as the U.K. Bribery Act of 2010, which became effective on July 1, 2011, and the Law "On the Fundamentals of Health Protection in the Russian Federation," which became effective in January 2012. In general, there is a worldwide trend to strengthen anticorruption laws and their enforcement, and the healthcare industry and medical equipment manufacturers have been particular targets of these investigation and enforcement efforts. Any violation of these laws by us or our agents or distributors could create a substantial liability for us, subject our officers and directors to personal liability and also cause a loss of reputation in the market. Transparency International's 2015 Corruption Perceptions Index measured the degree to which public sector corruption is perceived to exist in 168 countries/territories around the world, and found that nearly sixty-seven percent of the countries in the index, including many that we consider to be high growth areas for our products, such as China, India, Russia and Brazil, scored below 50, on a scale from 100 (very clean) to 0 (highly corrupt). We currently operate in many countries where the public sector is perceived as being more or highly corrupt. Our strategic business plans include expanding our business in regions and countries that are rated as higher risk for corruption activity by Transparency International. Becoming familiar with and implementing the infrastructure necessary to comply with laws, rules and regulations applicable to new business activities and mitigating and protecting against corruption risks could be quite costly. In addition, failure by us or our agents or distributors to comply with these laws, rules and regulations could delay our expansion into high-growth markets and could adversely affect our business. This notwithstanding, we will inevitably do more business, directly and potentially indirectly, in countries where the public sector is perceived to be more or highly corrupt and will be engaging in business in more countries perceived to be more or highly corrupt. Increased business in higher risk countries could subject us and our officers and directors to increased scrutiny and increased liability. In addition, we have conducted, and in the future expect to conduct internal investigations or face audits or investigations by one or more domestic or foreign government agencies, which could be costly and time-consuming, and could divert our management and key personnel from our business operations. For example, in June 2015, one of our foreign subsidiaries was charged by the Department for Investigation and Penal Action of Lisbon with alleged improper activities relating to three tenders of medical equipment in Portugal during the period of 2003 to 2009. We previously undertook an internal investigation of this matter and voluntarily disclosed the results of this investigation to the U.S. Department of Justice and the U.S. Securities and Exchange Commission. After the Company requested a judicial review available under Portuguese criminal procedure processes as to whether or not such charges are proper under Portuguese law, the matter was resolved and definitively dismissed, subject to a 30-day probation period which began on October 21, 2016, with no adverse findings or charges against the Company. Any such proceeding results in costs and management distraction, which could adversely affect our business and financial results. An adverse outcome under any such proceeding, investigation or audit could subject us to fines, or criminal or other penalties, which could adversely affect our business and financial results.

Competition laws. Due to our competitive position in many jurisdictions, compliance with competition laws is of increased importance to us. Regulatory authorities under whose laws we operate may have enforcement powers that can subject us to sanctions, and can impose changes or conditions in the way we conduct our business. In addition, an increasing number of jurisdictions also provide private rights of action for competitors or consumers to seek damages asserting claims of anti-competitive conduct. Increased government scrutiny of our actions or enforcement or private rights of action could adversely affect our business or damage our reputation. In addition, we have conducted, and in the future expect to conduct, internal investigations or face audits or investigations by one or more domestic or foreign government agencies, which could be costly and time-consuming, and could divert our management and key personnel from our business operations. An adverse outcome under any such investigation or audit could subject us to fines or criminal or other penalties, which could adversely affect our business and financial results.

PRODUCT DEFECTS OR MISUSE MAY RESULT IN MATERIAL PRODUCT LIABILITY OR PROFESSIONAL ERRORS AND OMISSIONS CLAIMS, LITIGATION, INVESTIGATION BY REGULATORY AUTHORITIES OR PRODUCT RECALLS THAT COULD HARM OUR FUTURE REVENUES AND REQUIRE US TO PAY MATERIAL UNINSURED CLAIMS

Our business exposes us to potential product liability claims that are inherent in the manufacture, sale, installation, servicing and support of medical devices and other devices that deliver radiation. Because our products are involved

in the intentional delivery of radiation to the human body and other situations where people may come into contact with radiation (for example, when our security and inspection products are being used to scan cargo), the collection and storage of patient treatment data for medical analysis and treatment delivery, the planning of radiation treatment and diagnostic imaging of the human body, and the diagnoses of medical problems, the possibility for significant injury and/or death exists to the intended or unintended recipient of the delivery. Our medical products operate within our customers' facilities and network systems, and under quality assurance procedures established by the facility that ultimately result in the delivery of radiation to patients. Human and other errors or accidents may arise from the operation of our products in complex environments, particularly with products from other vendors, where interoperability or data sharing protocol may not be optimized even though the equipment or system operates according to specifications. As a result, we may face substantial liability to patients, our customers and others for damages

resulting from the faulty, or allegedly faulty, design, manufacture, installation, servicing, support, testing or interoperability of our products with other products, or their misuse or failure. In addition, third party service providers could fail to adequately perform their obligations, which could subject us to further liability. We may also be subject to claims for property damages or economic loss related to or resulting from any errors or defects in our products, or the installation, servicing and support of our products. Any accident or mistreatment could subject us to legal costs, litigation, adverse publicity and damage to our reputation, whether or not our products or services were a factor. In connection with our products that collect and store patient treatment data, we may be liable for the loss or misuse of such private data, if those products fail or are otherwise defective.

Product liability actions are subject to significant uncertainty and may be expensive, time-consuming, and disruptive to our operations. For these and other reasons, we may choose to settle product liability claims against us, regardless of their actual merit. If a product liability action were finally determined against us, it could result in significant damages, including the possibility of punitive damages and our consolidated financial position, results of operations or cash flows could be materially adversely affected. Adverse publicity regarding any accidents or mistreatments, even ones that do not involve our products, could cause patients to be less receptive to radiotherapy or radiosurgery treatments, to question the efficacy of radiation therapy and radiosurgery and to seek other methods of treatment. Adverse publicity could also result in additional regulation of radiation therapy, radiosurgery, medical devices or the healthcare industry in general, and adversely affect our ability to promote, manufacture and sell our products. Both adverse publicity and increased regulatory activities could negatively impact our business and results of operations.

In addition, if a product we design or manufacture were defective (whether due to design, labeling or manufacturing defects, improper use of the product or other reasons) or found to be so by a competent regulatory authority, we may be required to correct or recall the product and notify other regulatory authorities. The adverse publicity resulting from a correction or recall, however imposed, could damage our reputation and cause customers to review and potentially terminate their relationships with us. A product correction or recall could consume management time and have an adverse financial impact on our business, including incurring substantial costs, losing revenues and accruing losses under GAAP.

We maintain limited product liability insurance coverage and currently self-insure professional liability/errors and omissions liability. Our product liability insurance policies are expensive and have high deductible amounts and self-insured retentions. Our insurance coverage may also prove to be inadequate, and future policies may not be available on acceptable terms or in sufficient amounts, if at all. If a material claim is successfully brought against us relating to a self-insured liability or a liability that is in excess of our insurance coverage, or for which insurance coverage is denied or limited, we could have to pay substantial damages, which could have a material adverse effect on our financial position and results of operations.

AS A STRATEGY TO ASSIST OUR VPT SALES EFFORTS, WE MAY PARTICIPATE IN PROJECT FINANCING OR OFFER EXTENDED PAYMENT TERMS, WHICH MAY ADVERSELY AFFECT OUR FINANCIAL RESULTS

We have provided financing for the construction and start-up operations of the Scripps Proton Therapy Center, MPTC and the New York Proton Center, and we may provide or be requested to provide financing to other potential VPT customers in the future. As of September 30, 2016, we had loaned $95.3 million, $40.7 million and $18.5 million to CPTC, MPTC and MM Proton I, LLC, respectively. Providing such financing could adversely affect our financial results, since we cannot provide assurance that a center will be completed on time or within budget, that the center can or will generate sufficient patient volumes and revenues to support scheduled loan payments or to facilitate a refinancing, or that the borrower will have the financial means to pay off any financing at maturity. In addition, in connection with our financing of the Scripps Proton Therapy Center, we cannot provide any assurance that any additional portion of our loan can be syndicated to third parties, or that the loan facility can be successfully refinanced upon the maturity of the loan. In November 2015, we and the other lenders of the CPTC loan for the Scripps Proton Therapy Center agreed to forbear principal and interest payments until April 2017, subject to certain extensions. At the end of fiscal year 2016, even though patient volumes continued to increase, CPTC was not in compliance with a patient volume covenant under the forbearance agreement, which would allow the lenders to call the loan or cease further funding under the loan agreement. If a borrower does not have the financial means to pay off its debts, and if

we cannot recover the amounts due us from the sale of any collateral, we may be required to write-off all, or a portion of the loan, which would adversely affect our financial results.

In addition, in some circumstances we offer longer or extended payment terms for qualified customers in VPT or our other businesses. Many of the areas where we offer such longer or extended payment terms have under-developed legal systems for securing debt and enforcing collection of debt. As of September 30, 2016, customer contracts with remaining terms of more than one year amounted to approximately six percent of our net accounts receivable balance. While we qualify customers to whom we offer longer or extended payment terms, their financial positions may change adversely over the longer time period given for payment. Concerns over continued economic instability could also make it more difficult for us to collect outstanding receivables. This may result in an increase in payment defaults and uncollectible accounts, or could cause us to increase our bad

debt expense, which would adversely affect our net earnings. In addition, longer or extended payment terms could impact the timing of our revenue recognition, and they have in the past and may in the future result in an increase in our days sales outstanding and thus a decrease in our cash flow from operations.

THE FINANCIAL RESULTS OF OUR PARTICLE THERAPY BUSINESS MAY FLUCTUATE AND BE UNPREDICTABLE

The development of our VPT business enables us to offer products for delivering image-guided, intensity-modulated proton therapy for the treatment of cancer. Our success in this area will depend upon the widespread awareness, acceptance and adoption by the oncology market of proton therapy systems for the treatment of cancer. However, this technology has not been widely adopted and future developments may not be adopted as quickly as technological developments in more traditional areas of radiation therapy.

Since proton therapy projects are generally large, highly customized and more complex than projects in our Oncology Systems radiotherapy business, planning for these projects takes more of our time and uses more of our resources than projects in our Oncology Systems radiotherapy business. Many of the components used in proton therapy equipment require long lead times, which may require an increase in our inventory levels. This may cause fluctuations in the operating results of VPT that may make it difficult to predict our results and to compare our results from period to period.

The construction of a proton therapy facility requires significant capital investment and may involve complex project financing. Consequently, this business is vulnerable to deterioration in general economic and market conditions. The worldwide economic downturn that began in 2008 resulted in a contraction in credit markets. This has made and may continue to make it more difficult for potential customers of this business to find appropriate financing for large proton therapy projects, which could cause them to delay or cancel their projects, or request that we participate in financing arrangements or make payment concessions in their agreements with us, which could impact our operating results. We have participated in the financing of several proton therapy projects, including the Scripps Proton Therapy Center, Maryland Proton Therapy Center and The New York Proton Center, through the extension of loans, loan commitments and deferred equipment payments. If we are unable to collect amounts owing to us under these arrangements it could have a material adverse effect on our financial condition and results of operations. In addition, in the event that one or more proton therapy projects to which we have provided financing were to default under project financing arrangements and the project finance lenders were to foreclose on the project, it could harm our reputation or the reputation of proton therapy projects generally and make it more difficult for future proton therapy projects to obtain financing. Challenges or delays in obtaining financing or commencing treatment could also impact the viability of one or more of our customers as a going concern. Changes in reimbursement rates for proton therapy treatments, or uncertainty regarding these reimbursement rates, such as we experienced in 2012 with the reductions to reimbursement rates for hospital based proton therapy centers in the United States by CMS, can affect growth or demand for our VPT products and services.

We compete for many proton therapy system sales through tenders, where parties compete on price and other factors. Many companies sell their products at a lower price than we do. If we are unable to lower our prices or our customers are not willing to pay for additional features and functionality that we may provide, there is a risk we will lose sales, and if we lower our prices to gain business, our margins and other financial results may suffer. Further, the award of certain proton therapy system orders may be subject to challenge by third parties, which can make these orders more unpredictable than orders for other products. Because an order for a proton therapy system can be relatively large and complex, the sales and customer decision cycles for proton therapy projects may take several years, and an order in one fiscal period (or the cancellation of an order as a result of bid challenge or otherwise) will cause our gross orders and revenues to vary significantly, cause fluctuations in the operating results of VPT that may make it difficult to predict our results and compare our results from period to period. We expect that a limited number of customers will account for a substantial portion of VPT's business for the foreseeable future. In instances where one customer undertakes multiple proton center projects, an adverse event with respect to one project could cause an adverse event with respect to the other projects, which could adversely impact our operating results and financial position.

Our estimates as to future operating results include certain assumptions about the results of VPT's business. If we are incorrect in our assumptions, our financial results could be materially and adversely affected. It is possible that VPT

could perform significantly below our expectations due to a number of factors that cannot be predicted with certainty, including future market conditions, revenue growth rates, and operating margins. These factors could adversely impact VPT's ability to meet its projected results, which could cause a portion or all of the goodwill of VPT to become impaired. As of September 30, 2016, the goodwill of VPT was $49.8 million. If we determine that VPT's goodwill becomes impaired, we would be required to record a charge that could have a material adverse effect on our results of operations in such period.

OUR PARTICLE THERAPY BUSINESS MAY SUBJECT US TO INCREASED RISK AND POTENTIAL LIABILITY

VPT's business may subject us to increased risk and potential liability. For example, because proton therapy projects are large in scale and require detailed project planning, failure to deliver or delays in delivering on our commitments could result in greater than expected liabilities, as we could be required to indemnify business partners and customers for losses suffered or incurred if we are unable to deliver our products in accordance with the terms of customer contracts. Additionally, customers have in the past requested and may in the future request that the systems vendor, as the primary technology provider, provide guarantees for and suffer penalties in relation to the overall construction project, as well as in some situations participate in or provide project financing for the project. Since the cost of each proton therapy center project will often exceed $100 million, the amount of potential liability and potential for financial loss would likely be higher than the levels historically assumed by us for our traditional radiation therapy business and may also exceed the project's value. Insurance covering these contingencies may be unobtainable or expensive. If we cannot reasonably mitigate or eliminate these contingencies or risks, our ability to competitively bid upon proton center projects will be negatively impacted or we may be required to assume material amounts of potential liability, all of which may have adverse consequences to us. In addition, we have encountered and may encounter additional challenges in the commercialization of the proton therapy products, which may increase our research and development costs and delay the introduction of our products. These and other unanticipated events could adversely affect our business and make our results of operations unpredictable.

WE COMPETE IN HIGHLY COMPETITIVE MARKETS, AND WE MAY LOSE MARKET SHARE TO COMPANIES WITH GREATER RESOURCES OR THE ABILITY TO DEVELOP MORE EFFECTIVE TECHNOLOGIES, OR WE COULD BE FORCED TO REDUCE OUR PRICES

The markets for radiation therapy equipment and software are characterized by rapidly evolving technology, intense competition and pricing pressure. New competitors may enter our markets, and we have encountered new competitors as we have entered new markets such as radiosurgery, VMAT and proton therapy. Some of these competitors may have greater financial, marketing and other resources than we have. To compete successfully, we must provide technically superior, proven products that deliver more precise, cost-effective, high quality clinical outcomes, in a complete package of products and services, and do so ahead of our competitors. As our Oncology Systems products are generally sold on a basis of total value to the customer, our business may suffer when purchase decisions are based solely upon price, which can happen if hospitals and clinics give purchasing decision authority to group purchasing organizations. The shift in the proportion of sales within our international region towards emerging market countries, which typically have purchased less complex, lower-priced products compared to more developed countries, and which usually have stiffer price competition, could also adversely impact our results of operations. New competitors may also delay customer purchasing decisions as customers evaluate the products of these competitors along with ours, potentially extending our sales cycle and adversely affecting our gross orders and revenues.

In Imaging Components, we often compete with companies that have greater financial, marketing and other resources than we have. Some of the major diagnostic imaging systems companies, which are the primary OEM customers for our X-ray components, also manufacture X-ray components, including X-ray tubes, for use in their own imaging systems products. We must compete with these in-house manufacturing operations for business from their affiliated companies. In addition, we compete against other stand-alone, independent X-ray tube manufacturers who compete with us for both the OEM business of major diagnostic imaging equipment manufacturers and the independent servicing business for X-ray tubes. The market for flat panel detectors is also very competitive. As a result, we must have an advantage in one or more significant areas, which may include lower product cost, better product quality and/or superior technology and/or performance.

With our security and inspection products, we compete with other OEM suppliers, primarily outside of the United States. The market for our X-ray tube and flat panel products used for nondestructive testing in industrial applications is small and highly fragmented.

The market for proton therapy products is still developing and is characterized by rapidly evolving technology and pricing pressure. Our ability to compete successfully depends, in part, on our ability to lower our product costs, develop and provide technically superior, proven products that deliver more precise, cost-effective, high quality

clinical outcomes, including integration of technologies such as our On-Board Imager (“OBI”) for IGRT and our motion management technologies.

In each of our business segments, existing competitors’ actions and new entrants may adversely affect our ability to compete. These competitors could develop technologies and products that are more effective than those we currently use or produce or that could render our products obsolete or noncompetitive. In addition, the timing of our competitors’ introduction of products into the market could affect the market acceptance and market share of our products. Some competitors offer specialized products that provide, or may be perceived by customers to provide, a marketing advantage over our mainstream cancer treatment products. Also, some of our competitors may not be subject to the same standards, regulatory and/or other legal

requirements that we are subject to, and therefore, they could have a competitive advantage in developing, manufacturing and marketing products and services. Any inability to develop, gain regulatory approval for and supply commercial quantities of competitive products to the market as quickly and effectively as our competitors could limit market acceptance of our products and reduce our sales. In addition, some of our smaller competitors could be acquired by larger companies that have greater financial strength, which could enable them to compete more aggressively. Our competitors could also acquire some of our suppliers or distributors, which could disrupt these supply or distribution arrangements and result in less predictable and reduced revenues in our businesses. Any of these competitive factors could negatively affect our pricing, sales, revenues, market share and gross margins and our ability to maintain or increase our operating margins.

OPEN ARCHITECTURE IS BECOMING INCREASINGLY IMPORTANT, AND SALES OF OUR PRODUCTS COULD FALL IF WE FAIL TO ACHIEVE THIS

As radiation oncology treatment becomes more complex, our customers are increasingly focusing on ease-of-use and interconnectivity. Our equipment and software are highly sophisticated and a high level of training and education is required in order to use them competently and safely-requirements made even more important because they work together within integrated environments. We have directed substantial product development efforts into (i) increasing the interconnectivity of our products for more seamless operation within a system, (ii) making our software products easier to use and (iii) reducing setup and treatment times to increase patient throughput. We have emphasized an “open systems” approach that allows customers to “mix and match” our individual products, incorporate products from other manufacturers, share information with other systems or products and use the equipment for offering various methods of radiation and chemotherapy treatment. We have done this based on our belief that such interconnectivity will increase the acceptance and adoption of IMRT, IGRT and VMAT and will stimulate demand for our products. There are competitive “closed-ended” dedicated-use systems, however, that place simplicity of use ahead of flexibility. If we have misjudged the importance to our customers of maintaining an “open systems” approach, or if we are unsuccessful in our efforts to increase interconnectivity, enhance ease-of-use and reduce setup and treatment times, our revenues could suffer.

Obtaining and maintaining interoperability and compatibility can be costly and time-consuming. While we try to use standard published protocols for communication with widely-used oncology products manufactured by other companies, if we cannot do this, we may need to develop individual interfaces so that our products communicate correctly with the other company products. When other companies modify the design or functionality of their products, this may affect their compatibility with our products. In addition, when we improve our products, customers may be reluctant to adopt our new technology due to potential interoperability issues. For example, a clinic may be unwilling to implement one of our new technologies because its third-party software does not yet communicate correctly with our new product. Our ability to obtain compatibility with products of other companies may depend on our ability to obtain adequate information from them regarding their products. In many cases, these third parties are our competitors and may schedule their product changes and delay their release of relevant information to place us at a competitive disadvantage. When we modify our products to make them interoperable or compatible with third-party products, we may be required to obtain additional regulatory clearances. This process is costly and could delay our ability to release our products for commercial use. It is also possible that, despite our best efforts, we may not be able to make our products interoperable or compatible with widely used third-party products or may only be able to do so at a prohibitive expense, making our products less attractive or more costly to our customers.

PROTECTING OUR INTELLECTUAL PROPERTY CAN BE COSTLY AND WE MAY NOT BE ABLE TO MAINTAIN LICENSED RIGHTS, AND IN EITHER CASE OUR COMPETITIVE POSITION WOULD BE HARMED IF WE ARE NOT ABLE TO DO SO

We file applications as appropriate for patents covering new products and manufacturing processes. We cannot be sure, however, that our current patents, the claims allowed under our current patents, or patents for technologies licensed to us will be sufficiently broad to protect our technology position against competitors. Issued patents owned by, or licensed to, us may be challenged, invalidated or circumvented, or the rights granted under the patents may not provide us with competitive advantages. We also cannot be sure that patents will be issued from any of our pending or future patent applications. Asserting our patent rights against others in litigation or other legal proceedings is costly

and diverts managerial resources. For example, during September and October 2015, we filed several complaints in the U.S. and foreign courts and the U.S. International Trade Commission against Elekta AB and its subsidiaries alleging infringement of various patents relating to certain aspects of cone beam imaging, cone-beam gantries, volumetric modulated arc therapy, and combined magnetic resonance imaging-linear accelerator systems. These legal proceedings are ongoing and, although there have been interim court rulings in certain jurisdictions, there have been no definite outcomes to date. An unfavorable outcome in these proceedings or in any other such litigation or proceedings could harm us. In addition, we may not be able to detect patent infringement by others or may lose our competitive position in the market before we are able to do so.

We also rely on a combination of copyright, trade secret and other laws, and contractual restrictions on disclosure, copying and transferring title (including confidentiality agreements with vendors, strategic partners, co-developers, employees, consultants and other third parties), to protect our proprietary and other confidential rights. These protections may prove inadequate, since agreements may still be breached and we may not have adequate remedies for a breach, and our trade secrets may otherwise become known to or be independently developed by others. In the event that our proprietary or confidential information is misappropriated, our business and financial results could be adversely impacted. We have trademarks, both registered and unregistered, that are maintained and enforced to provide customer recognition for our products in the marketplace, but unauthorized third parties may still use them. We also have agreements with third parties that license to us certain patented or proprietary technologies. In some cases products with substantial revenues may depend on these license rights. If we were to lose the rights to license these technologies, or our costs to license these technologies were to materially increase, our business would suffer.

THIRD PARTIES MAY CLAIM WE ARE INFRINGING THEIR INTELLECTUAL PROPERTY, AND WE COULD SUFFER SIGNIFICANT LITIGATION OR LICENSING EXPENSES OR BE PREVENTED FROM SELLING OUR PRODUCTS

There is a substantial amount of litigation over patent and other intellectual property rights in the industries in which we compete. Our competitors, like companies in many high technology businesses, continually review other companies' activities for possible conflicts with their own intellectual property rights. In addition, non-practicing entities may review our activities for conflicts with their patent rights. Determining whether a product infringes a third party's intellectual property rights involves complex legal and factual issues, and the outcome of this type of litigation is often uncertain. Third parties may claim that we are infringing their intellectual property rights. We may not be aware of intellectual property rights of others that relate to our products, services or technologies. From time to time, we have received notices from third parties asserting infringement and we have been subject to lawsuits alleging infringement of third-party patent or other intellectual property rights. For example, in September 2015, Elekta Ltd. and William Beaumont Hospital served us with a complaint alleging infringement of three patents related to certain aspects of cone beam imaging in conjunction with radiotherapy. In February 2016, Elekta Ltd. filed several complaints in U.S. and foreign courts alleging infringement of certain patents related to linear accelerator control systems and treatment planning. In October 2016, Elekta Ltd. filed a complaint in the United Kingdom alleging infringement of a further patent related to linear accelerator control systems and treatment planning, and added a patent relating to the same subject matter to its existing U.S. suit filed in February 2016. These lawsuits are ongoing, and we are not able to predict their ultimate outcome. We may incur substantial costs and expend significant management resources defending against these claims or prosecuting our claims and our defense of these claims or our prosecution of claims against Elekta may ultimately not be successful. Any dispute regarding patents or other intellectual property could be costly and time-consuming, and could divert our management and key personnel from our business operations. We may not prevail in a dispute. We do not maintain insurance for intellectual property infringement, so costs of defense, whether or not we are successful in defending an infringement claim, will be borne by us and could be significant. If we are unsuccessful in defending or appealing an infringement claim, we may be subject to significant damages and our consolidated financial position, results of operations or cash flows could be materially adversely affected. If actual liabilities significantly exceed our estimates regarding potential liabilities, our consolidated financial position, results of operations or cash flows could be materially adversely affected. We may also be subject to injunctions against development and sale of our products, the effect of which could be to materially reduce our revenues. Furthermore, a third party claiming infringement may not be willing to license its rights to us, and even if a third party rights holder is willing to do so, the amounts we might be required to pay under the associated royalty or license agreement could be significant. As such, we could decide to alter our business strategy or voluntarily cease the allegedly infringing actions rather than face litigation or pay a royalty, which could adversely impact our business and results of operations.

UNFAVORABLE RESULTS OF LEGAL PROCEEDINGS COULD MATERIALLY ADVERSELY AFFECT OUR FINANCIAL RESULTS

From time to time, we are a party to or otherwise involved in legal proceedings, claims and government inspections or investigations and other legal matters, both inside and outside the United States, arising in the ordinary course of our

business or otherwise. We are currently involved in various legal proceedings and claims, including product liability claims and intellectual property claims (such as the current litigation with Elekta Ltd. and William Beaumont Hospital), that have not yet been fully resolved and additional claims may arise in the future. Legal proceedings are often lengthy, taking place over a period of years with interim motions or judgments subject to multiple levels of review (such as appeals or rehearings) before the outcome is final. Litigation is subject to significant uncertainty and may be expensive, time-consuming, and disruptive to our operations. For these and other reasons, we may choose to settle legal proceedings and claims, regardless of their actual merit.

If a legal proceeding were finally resolved against us, it could result in significant compensatory damages, and in certain circumstances punitive or trebled damages, disgorgement of revenue or profits, remedial corporate measures or injunctive relief imposed on us. If our existing insurance does not cover the amount or types of damages awarded, or if other resolution or actions taken as a result of the legal proceeding were to restrain our ability to market one or more of our material products or services, our consolidated financial position, results of operations or cash flows could be materially adversely affected. In addition, legal proceedings, and any adverse resolution thereof, can result in adverse publicity and damage to our reputation, which could adversely impact our business.

THE LOSS OF A SUPPLIER OR ANY INABILITY TO OBTAIN SUPPLIES OF IMPORTANT COMPONENTS COULD RESTRICT OUR ABILITY TO MANUFACTURE PRODUCTS, CAUSE DELAYS IN OUR ABILITY TO DELIVER PRODUCTS, OR SIGNIFICANTLY INCREASE OUR COSTS

We obtain some of the components included in our products from a limited group of suppliers or from a single source supplier, such as the radioactive sources for high dose afterloaders, klystrons for linear accelerators, transistor arrays and cesium iodide coatings for flat panel detectors, and specialized integrated circuits, X-ray tube targets, housings, glass frames and various other components; and radiofrequency components, magnets and gantry hardware for proton therapy systems. In addition, following the planned separation of our Imaging Components business, Varex Imaging Corporation will be the sole source supplier of tubes and panels used in certain of our products. If we lose any of these suppliers, if their operations were substantially interrupted, or if any of them failed to meet performance or quality specifications, we may be required to obtain and qualify one or more replacement suppliers. Such an event may then also require us to redesign or modify our products to incorporate new parts and/or further require us to obtain clearance, qualification or certification of these products by the FDA or obtain other applicable regulatory approvals in other countries. Events like these could significantly increase costs for the affected product and likely cause material delays in delivery of that and other related products. Although we have insurance to protect against business interruption loss, this insurance coverage may not be adequate or continue to remain available on acceptable terms, if at all. Furthermore, some of our single-source suppliers provide components for some of our rapidly growing product lines. Manufacturing capacity limitations of any of our suppliers or other inability of these suppliers to meet increasing demand could adversely affect us, resulting in curtailed growth opportunities for our affected product lines. Shortage of, and greater demand for, components and subassemblies could also increase manufacturing costs if the supply/demand imbalance increases the price of the components and subassemblies. Disruptions or loss of any of our limited- or sole-sourced components or subassemblies or the capacity limitations of the suppliers for these components or subassemblies, including the ones referenced above, could adversely affect our business and financial results and could damage our customer relationships.

A SHORTAGE OR CHANGE IN SOURCE OF RAW MATERIALS COULD RESTRICT OUR ABILITY TO MANUFACTURE PRODUCTS, CAUSE DELAYS, OR SIGNIFICANTLY INCREASE OUR COST OF GOODS

We rely upon the supplies of certain raw materials such as tungsten, lead, iridium and copper for Oncology Systems and security and inspection products; copper, lead, tungsten, rhenium, molybdenum zirconium, and various high grades of steel alloy for X-ray tubes, and high-grade steel, high-grade copper and iron for VPT. Worldwide demand, availability and pricing of these raw materials have been volatile, and we expect that availability and pricing will continue to fluctuate in the future. If supplies are restricted or become unavailable or if prices increase, this could constrain our manufacturing of affected products, reduce our profit margins or otherwise adversely affect our business.

Pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act, the SEC has promulgated rules regarding disclosure of the presence in a company’s products of certain metals, known as “conflict minerals,” which are metals mined from the Democratic Republic of the Congo and adjoining countries, as well as procedures regarding a manufacturer’s efforts to identify the sourcing of those minerals from this region. Complying with these rules requires investigative efforts, which has and will continue to cause us to incur associated costs, and could adversely affect the sourcing, supply, and pricing of materials used in our products, or result in process or manufacturing modifications, all of which could adversely affect our results of operations.

CONSOLIDATION AMONG OUR ONCOLOGY SYSTEMS CUSTOMERS COULD ADVERSELY AFFECT OUR SALES OF ONCOLOGY PRODUCTS

We have seen and may continue to see some consolidation among our customers in our Oncology Systems business, as hospitals and clinics combine through mergers and acquisitions, and as they join group purchasing organizations or affiliated enterprises. In addition, we have seen and may continue to see integration of equipment and information systems among hospitals as they consolidate their networks. As customers consolidate and/or integrate, the volume of product sales to these customers might decrease. Alternatively, order size may increase, as what were previously more than one customer combine orders as one entity, or as groups of organizations combine their purchases. As a result, as orders increase in size and require

more customer approvals, the purchasing cycle for our Oncology Systems products could lengthen. Both increased order size and extended purchasing cycles could cause our gross orders to be more volatile and less predictable. In addition, some customers appear to be developing new partnerships across clinical specialties to prepare for the possibility of operating in an ACO environment and the possibility of bundled reimbursement payments. Group purchasing organizations often focus on pricing as the determinant in making purchase decisions. A reduction in gross orders could affect the level of future revenues, which would adversely affect our operating results, financial condition, and the price of VMS common stock.

WE SELL OUR IMAGING COMPONENTS TO A LIMITED NUMBER OF OEM CUSTOMERS, MANY OF WHICH ARE ALSO OUR COMPETITORS, AND A REDUCTION IN BUSINESS OR INABILITY TO PROPERLY FORECAST SALES BY ONE OR MORE OF THESE CUSTOMERS COULD REDUCE OUR SALES

We sell our X-ray tube products to a limited number of OEM customers, many of which are also our competitors with in-house X-ray tube manufacturing operations. If these customers manufacture a greater percentage of their components in-house or otherwise lower external sourcing costs, such as we have begun to see as a result of the recent strengthening of the U.S. Dollar, we could experience reductions in purchasing volume by, or loss of, one or more of these customers. In the event of such a reduction or loss it could have a material adverse effect on our Imaging Components business. In addition, if any of our customers modify their business operations in ways that result in a reduction in or the discontinuation of purchases of our imaging components products, or divest business operations to third parties that reduce or discontinue purchasing our imaging components products, it could have a material adverse effect on our Imaging Components business. For example, lower purchases from a customer with higher X-ray tube inventory, due in part to longer tube life, has contributed to recent declines in Imaging Component business revenues. Moreover, economic uncertainties over the past few years, natural disasters and other matters beyond our control have made it difficult for our OEM customers to accurately forecast and plan future business activities. Such economic uncertainties and natural disasters, as well as other factors, have previously impacted our Imaging Components business, resulting in inventory reduction efforts and slowdowns in sales at some of these customers. Similar inventory adjustments and slowdowns in sales could occur in the future. Our agreements for imaging components may contain purchasing estimates that are based on our customers' historical purchasing patterns, and actual purchasing volumes under the agreements may vary significantly from these estimates.

ORDERS FOR OUR SECURITY AND INSPECTION PRODUCTS TEND TO BE UNPREDICTABLE

Our Imaging Components business designs, manufactures, sells and services Linatron X-ray accelerators, imaging processing software and image detection products for security and inspection, such as cargo screening at ports and borders and nondestructive examination for a variety of applications, as well as industrial applications. We generally sell security and inspection products to OEMs who incorporate our products into their inspection systems, which are then sold to customs and other government agencies, as well as to commercial organizations in the casting, power, aerospace, chemical, petro-chemical and automotive industries. We believe growth in our security and inspection products will be driven by security cargo screening and border protection needs, as well as by the needs of customs agencies to verify shipments for assessing duties and taxes. Orders for our security and inspection products have been and may continue to be unpredictable as governmental agencies may place large orders with us or our OEM customers in a short time period, and then may not place any orders for a long time period thereafter. Because it is difficult to predict our OEM customer delivery, the actual timing of sales and revenue recognition varies significantly. The market for border protection systems has slowed significantly and end customers, particularly in oil-based economies and war zones in which we have a significant customer base, are delaying system deployments or tenders and have considered moving to alternative sources, resulting in a decline in the demand for security and inspection products which is expected to continue.

In addition, demand for our security and inspection products is heavily influenced by U.S. and foreign governmental policies on national and homeland security, border protection and customs revenue activities, which depend upon government budgets and appropriations that are subject to economic conditions, as well as political changes. We have seen customers freeze or dramatically reduce purchases and capital project expenditures, delay projects, or act cautiously as governments around the world wrestle with spending priorities. As economic growth remains sluggish in various jurisdictions and appears to be deteriorating in others, and as concerns about levels of government

employment and government debt continue, we expect that these effects will also continue. Furthermore, bid awards in this business may be subject to challenge by third parties, as we have previously encountered with a large government project. These factors make the timing of orders, sales and revenues in this business more unpredictable and could cause volatility in our revenues and earnings, and therefore the price of VMS common stock.

IF WE ARE UNABLE TO PROVIDE THE SIGNIFICANT EDUCATION AND TRAINING REQUIRED FOR THE HEALTHCARE MARKET TO ACCEPT OUR PRODUCTS, OUR BUSINESS WILL SUFFER

In order to achieve market acceptance for our radiation therapy products, we often need to educate physicians about the use of treatment procedures such as IMRT, IGRT, VMAT, SRS, SBRT or proton therapy, overcome physician objections to some of the effects of the product or its related treatment regimen, convince healthcare payors that the benefits of the product and its related treatment process outweigh its costs and help train qualified physicists in the skilled use of the product. For example, the complex and dynamic nature of IMRT and IGRT requires significant education of hospital personnel and physicians regarding the benefits of and practices associated with IMRT and IGRT. Further, the complexity and high cost of proton therapy requires similar significant education, as well as education regarding construction and facility requirements. We have devoted and will continue to devote significant resources on marketing and educational efforts to create awareness of IMRT, IGRT, VMAT stereotactic radiotherapy, SRS, SBRT and proton therapy generally, to encourage the acceptance and adoption of our products for these technologies and to promote the safe and effective use of our products in compliance with their operating procedures. Future products may not gain adequate market acceptance among physicians, patients and healthcare payors, even if we spend significant time and expense educating them about these products.

OUR BUSINESS MAY SUFFER IF WE ARE NOT ABLE TO HIRE AND RETAIN QUALIFIED PERSONNEL

Our future success depends, to a great degree, on our ability to retain, attract, expand, integrate and train our management team and other key personnel, such as qualified engineering, service, sales, marketing and other staff. We compete for key personnel with other medical equipment and software manufacturers and technology companies, as well as universities and research institutions. Because this competition is intense, compensation-related costs could increase significantly if the supply of qualified personnel decreases or demand increases. If we are unable to hire and train qualified personnel, we may not be able to maintain or expand our business. Additionally, if we are unable to retain key personnel, we may not be able to replace them readily or on terms that are reasonable, which also could hurt our business.

IF WE ARE NOT ABLE TO MATCH OUR MANUFACTURING CAPACITY WITH DEMAND FOR OUR PRODUCTS, OUR FINANCIAL RESULTS MAY SUFFER

Many of our products have a long production cycle, and we need to anticipate demand for our products in order to ensure adequate manufacturing or testing capacity. If we are unable to anticipate demand and our manufacturing or testing capacity does not keep pace with product demand, we will not be able to fulfill orders in a timely manner, which may negatively impact our financial results and overall business. Conversely, if demand for our products decreases, the fixed costs associated with excess manufacturing capacity may harm our financial results.

WE MAY NOT REALIZE EXPECTED BENEFITS FROM ACQUISITIONS OF OR INVESTMENTS IN NEW BUSINESSES, PRODUCTS, OR TECHNOLOGIES, WHICH COULD HARM OUR BUSINESS

We need to grow our businesses in response to changing technologies, customer demands and competitive pressures. In some circumstances, we may decide to grow our business through the acquisition of complementary businesses, products or technologies rather than through internal development. For example, during fiscal year 2014, we acquired certain assets of Velocity and Transpire, during fiscal year 2015, we acquired Claymount and a majority interest in MeVis, and during 2016 we acquired the radiotherapy business of Candela. Identifying suitable acquisition candidates can be difficult, time-consuming and costly, and we may not be able to identify suitable candidates or successfully complete identified acquisitions. In addition, completing an acquisition can divert our management and key personnel from our current business operations, which could harm our business and affect our financial results. Even if we complete an acquisition, we may not be able to successfully integrate newly acquired organizations, products, technologies or employees into our operations, or may not fully realize some of the expected synergies. Integrating an acquisition can also be expensive and time-consuming, and may strain our resources. It may cost us more to commercialize new products than we originally anticipated, as we experienced with our proton therapy systems, or cause us to increase our expenses related to research and development, either of which could adversely impact our results of operations. In many instances, integrating a new business will also involve implementing or improving internal controls appropriate for a public company into a business that lacks them. It is also possible that an acquisition could increase our risk of litigation, as a third party may be more likely to assert a legal claim following an

acquisition because of perceived deeper pockets or perceived greater value of a claim. In addition, we may be unable to retain the employees of acquired companies, or the acquired company's customers, suppliers, distributors or other partners for a variety of reasons, including the fact that these entities may be our competitors or may have close relationships with our competitors. Failure to manage these risks could have a material adverse effect on our business, results of operations and financial condition.

Further, we may find that we need to restructure or divest acquired businesses, or assets of those businesses. Even if we do so, an acquisition may not produce the full efficiencies, growth or benefits we expected. If we decide to sell assets or a business, as we did in fiscal year 2008 with the scientific research instruments business that we acquired as part of our acquisition of ACCEL GmbH, it may be difficult to identify buyers or alternative exit strategies on acceptable terms, in a timely manner, or at all, which could delay the accomplishment of our strategic objectives. We may be required to dispose of a business at a lower price or on less advantageous terms, or to recognize greater losses, than we had anticipated.

If we acquire a business, we allocate the total purchase price to the acquired businesses' tangible assets and liabilities, identifiable intangible assets and liabilities based on their fair values as of the date of the acquisition, and record the excess of the purchase price over those fair values as goodwill. If we fail to achieve the anticipated growth from an acquisition, or if we decide to sell assets or a business, we may be required to recognize an impairment loss on the write down of our assets and goodwill, which could adversely affect our financial results. In addition, acquisitions can result in potentially dilutive issuances of equity securities or the incurrence of debt, contingent liabilities or expenses, or other charges, any of which could harm our business and affect our financial results.

Additionally, we have investments in privately held companies that are subject to risk of loss of investment capital. These investments are inherently risky, in some instances because the markets for the technologies or products these companies have under development may never materialize or reach expectations. If these companies do not succeed, we could lose some or all of our investment in these companies. For example, in fiscal year 2014, we recorded a charge relating to the impairment of a portion of our equity investment in a privately-held company when we became aware of certain indicators of impairment.

WE MAY FACE ADDITIONAL RISKS FROM THE ACQUISITION OR DEVELOPMENT OF NEW LINES OF BUSINESS

From time to time, we may acquire or develop new lines of business, as we did with particle therapy. There are substantial risks and uncertainties associated with new lines of business, particularly in instances where the markets are not fully developed. Risks include developing knowledge of and experience in the new business, recruiting market professionals, increasing research and development expenditures, and developing and capitalizing on new relationships with experienced market participants. This may mean significant investment and involvement of our senior management to acquire or develop, then integrate, the business into our operations. Timelines for integration of new businesses may not be achieved and price and profitability targets may not prove feasible, as new products can carry lower gross margins than existing products. External factors, such as compliance with regulations, competitive alternatives, and shifting market preferences, may also impact whether implementation of a new business will be successful. Failure to manage these risks could have a material adverse effect on our business, results of operations and financial condition.

WE WORK WITH DISTRIBUTORS FOR SALES IN SOME TERRITORIES, AND LOSING THEM COULD HARM OUR REVENUES IN THAT TERRITORY

We have strategic relationships with a number of key distributors, including Siemens AG, for sales and service of our products. If these strategic relationships end and are not replaced, our revenues from product sales in these territories and/or ability to service our products in the territories serviced by these distributors could be adversely affected.

FLUCTUATIONS IN OUR OPERATING RESULTS, INCLUDING QUARTERLY GROSS ORDERS, REVENUES, AND MARGINS, MAY CAUSE OUR STOCK PRICE TO BE VOLATILE, WHICH COULD CAUSE LOSSES FOR OUR STOCKHOLDERS

We have experienced and expect in the future to experience fluctuations in our operating results, including gross orders, revenues and margins, from period to period. Drivers of orders include the introduction and timing of announcement of new products or product enhancements by us and our competitors, as well as changes or anticipated changes in third party reimbursement amounts or policies applicable to treatments using our products. The availability of economic stimulus packages or other government funding, or reductions thereof, may also affect timing of customer purchases. Many of our products require significant capital expenditures by our customers. Accordingly, individual product orders can be quite large in dollar amounts, which can extend the customer purchasing cycle. We have experienced this with our IGRT products, and it is especially true with our proton therapy products because of

the high cost of the proton therapy equipment and the complexity of project financing. In addition, the budgeting cycles of hospitals and clinics for capital equipment purchases are frequently fixed well in advance. Economic uncertainty also tends to extend the purchasing cycle as potential customers more closely scrutinize and prioritize their capital spending budgets, and analyze appropriate financing alternatives. In addition, some of our more sophisticated equipment, such as IGRT and proton therapy products, requires greater site preparation and longer

construction cycles, which can delay customer decision cycles and the placement of orders even further. When orders are placed, installation is accomplished and the revenues recognized affect our quarterly results.

Once orders are received and booked into backlog, factors that may affect whether these orders become revenue (or are cancelled or deemed dormant and reflected as a reduction in the net order amounts) and the timing of revenue include:

- delay in shipment due, for example, to an unanticipated construction delay at a customer location where our products are to be installed, cancellations or reschedulings by customers, extreme weather conditions, natural disasters, port strikes or other labor actions;
- a challenge to a bid award for one or more of our products;
- delay in the installation and/or acceptance of a product;
- failure to satisfy contingencies associated with an order;
- the method of accounting used to recognize revenue;
- a change in a customer's financial condition or ability to obtain financing; or
- timing of necessary regulatory approvals or authorizations.

Our quarterly operating results, including our margins, may also be affected by a number of other factors, including:

- changes in our or our competitors' pricing or discount levels;
- changes in foreign currency exchange rates;
- changes in the relative portion of our revenues represented by our various products, including the relative mix between higher margin and lower margin products;
- changes in the relative portion of our revenues represented by our international region as a whole, by regions within the overall region, as well as by individual countries (notably those in emerging markets);
- fluctuation in our effective tax rate, which may or may not be known to us in advance;
- changes to our organizational structure, which may result in restructuring or other charges;
- disruptions in the supply or changes in the costs of raw materials, labor, product components or transportation services;
- disruptions in our operations, including our ability to manufacture products, caused by events such as earthquakes, fires, floods, terrorist attacks or the outbreak of epidemic diseases;
- the impact of changing levels of sales on sole purchasers of certain of our imaging components;
- the unfavorable outcome of any litigation or administrative proceeding or inquiry, as well as ongoing costs associated with legal proceedings; and
- accounting changes and adoption of new accounting pronouncements.

Because many of our operating expenses are based on anticipated capacity levels and a high percentage of these expenses are fixed for the short term, a small variation in the timing of revenue recognition can cause significant variations in operating results from quarter to quarter. Our overall gross margin may also be impacted by the gross margin of our proton therapy products, which presently carry lower gross margins than do our traditional radiotherapy products. If our gross margins fall below the expectation of securities analysts and investors, the trading price of VMS common stock would likely decline.

We report our gross orders and backlog on a quarterly and annual basis. It is important to understand that, unlike revenues, gross orders and backlog are not governed by GAAP, and are not within the scope of the audit conducted by our independent registered public accounting firm; therefore, investors should not interpret our gross orders or backlog in such a manner. Also, for the reasons set forth above, our gross orders and backlog cannot necessarily be relied upon as accurate predictors of future revenues. Order cancellation or delays in customer purchase decisions or delivery dates will reduce our backlog and future revenues, and we cannot predict if or when orders will mature into revenues. Particularly high levels of cancellations in one period will make it difficult to compare our operating results for other periods. Our gross orders, backlog, revenues and net earnings in one or more future periods may fall below the expectations of securities analysts and investors. In that event, the trading price of VMS common stock would almost certainly decline.

WE HAVE ENTERED INTO A CREDIT FACILITY AGREEMENT THAT RESTRICTS CERTAIN ACTIVITIES, AND FAILURE TO COMPLY WITH THIS AGREEMENT MAY HAVE AN ADVERSE EFFECT ON OUR BUSINESS, LIQUIDITY AND FINANCIAL POSITION

We maintain a credit facility with debt outstanding that contains restrictive financial covenants, including financial covenants that require us to comply with specified financial ratios. We may have to curtail some of our operations to comply with these covenants. In addition, our revolving credit facility contains other affirmative and negative covenants that could restrict our operating and financing activities. These provisions limit our ability to, among other things, incur future indebtedness, contingent obligations or liens, guarantee indebtedness, make certain investments and capital expenditures, sell stock or assets and pay dividends, and consummate certain mergers or acquisitions. Because of the restrictions on our ability to create or assume liens, we may find it difficult to secure additional indebtedness if required. In addition, we have in the past used borrowings under our credit facility to fund the repurchase of VMS shares and we may continue to do so in the future. In the event that we cannot use borrowings under our credit facility to fund share repurchases, whether because we have drawn down the maximum amounts borrowable under our credit facility, to do so would violate covenants in our credit facility, or otherwise, and we do not have access to other cash resources necessary to fund the desired share repurchases, it could have an adverse effect on our earnings per share. Furthermore, if we fail to comply with the credit facility requirements, we may be in default. Upon an event of default, if the credit agreement is not amended or the event of default is not waived, the lender could declare all amounts outstanding, together with accrued interest, to be immediately due and payable. If this happens, we may not be able to make those payments or borrow sufficient funds from alternative sources to make those payments. Even if we were to obtain additional financing, that financing may be on unfavorable terms.

CHANGES IN INTERPRETATION OR APPLICATION OF GENERALLY ACCEPTED ACCOUNTING PRINCIPLES MAY ADVERSELY AFFECT OUR OPERATING RESULTS

We prepare our financial statements to conform to GAAP. These principles are subject to interpretation by the Financial Accounting Standards Board (“FASB”), American Institute of Certified Public Accountants, the SEC and various other regulatory or accounting bodies. A change in interpretations of, or our application of, these principles can have a significant effect on our reported results and may even affect our reporting of transactions completed before a change is announced. In addition, when we are required to adopt new accounting standards, our methods of accounting for certain items may change, which could cause our results of operations to fluctuate from period to period and make it more difficult to compare our financial results to prior periods.

As our operations evolve over time, we may introduce new products or new technologies that require us to apply different accounting principles, including ones regarding revenue recognition, than we have applied in past periods. Currently, we recognize revenues for our proton therapy systems and proton therapy commissioning contracts and for certain highly customized image detection systems in our Imaging Components business under contract accounting rules, which affects the timing of revenue recognition. We could be required to apply contract accounting rules to other businesses in the future. Under contract accounting rules, the use of the percentage-of-completion method involves considerable use of estimates in determining revenues, costs and profits and in assigning dollar amounts to relevant accounting periods, estimates which must be periodically reviewed and appropriately adjusted. For example, revenues recognized under the percentage-of-completion method are based on contract costs incurred to date compared with total estimated contract costs. In circumstances in which the final outcome of a contract cannot be precisely estimated but a loss on the contract is not expected, we recognize revenues under the percentage-of-completion method based on a zero profit margin until more precise estimates can be made. Recognizing revenues using the percentage-of-completion method based on a zero profit margin, as we had done with the revenues associated with the Scripps Proton Therapy Center in the earlier stages of the project, lowers our gross margins and makes it more difficult to compare our financial results from quarter to quarter. In addition, if we were to recognize revenues for our proton therapy systems and services under either the completed contract method or outside of contract accounting rules altogether, we would defer revenue until a contract is completed or substantially completed. This may cause our results of operations to fluctuate from period to period.

If our estimates prove to be inaccurate or circumstances change over time, we would be required to adjust revenues or even record a contract loss in later periods, and our financial results could suffer. In addition, if a loss is expected on a

contract under the percentage-of-completion method, the estimated loss would be charged to cost of sales in the period the loss is identified. The application of different types of accounting principles and related potential changes may make it more difficult to compare our financial results from quarter to quarter, and the trading price of VMS common stock could suffer or become more volatile as a result.

PROVISIONS OF DELAWARE LAW AND OUR CHARTER DOCUMENTS COULD BE INSUFFICIENT TO DETER A HOSTILE TAKEOVER; AND ACTIONS OF ACTIVIST STOCKHOLDERS COULD ADVERSELY AFFECT OUR BUSINESS

Certain provisions of Delaware law and of our certificate of incorporation and by-laws could deter a hostile takeover, while others could be insufficient to deter a hostile takeover. Our stockholder rights plan expired in December 2008, and we did not renew it. In addition, in February 2014 our stockholders approved, and we filed an amendment to our certificate of incorporation to declassify our Board of Directors commencing in 2016. Both of these changes reduced our ability to defend against a hostile takeover. The remaining provisions of Delaware law and of our charter documents may not be effective in defending against a hostile takeover or attack by an activist stockholder that may not be in the best interest of all of our shareholders, which could distract our management and adversely affect our business. In addition, we may be subject to one or more campaigns by stockholders who desire to increase stockholder value in the short term. Any such campaign could be costly and time-consuming, disrupt our operations and divert the attention of management and our employees from executing on our strategic goals, any of which could have an adverse effect on our business.

ENVIRONMENTAL LAWS IMPOSE COMPLIANCE COSTS ON OUR BUSINESS AND CAN ALSO RESULT IN LIABILITY

We are subject to environmental laws around the world. These laws regulate many aspects of our operations, including our handling, storage, transport and disposal of hazardous materials. They can also impose cleanup liabilities, including with respect to discontinued operations. As a consequence, we can incur significant environmental costs and liabilities, some recurring and others not recurring. Although we follow procedures intended to comply with existing environmental laws, we, like other businesses, can never completely eliminate the risk of contamination or injury from certain materials that we use in our business and, therefore, the prospect of resulting claims and damage payments. We may also be assessed fines or penalties for failure to comply with environmental laws and regulations. Although insurance has provided coverage for portions of cleanup costs resulting from historical occurrences, we maintain only limited insurance coverage for costs or claims that might result from any future contamination.

Future changes in environmental laws could also increase our costs of doing business, perhaps significantly. Several countries, including some in the EU, now require medical equipment manufacturers to bear certain disposal costs of products at the end of the product’s useful life, increasing our costs. The EU has also adopted directives that may lead to restrictions on the use of certain hazardous substances or other regulated substances in some of our products sold there. These directives, along with another that requires substance information to be provided upon request, could increase our operating costs in order to maintain access to certain markets. All of these costs, and any future violations or liabilities under environmental laws or regulations, could have a material adverse effect on our business.

OUR OPERATIONS ARE VULNERABLE TO INTERRUPTION OR LOSS DUE TO NATURAL OR OTHER DISASTERS, POWER LOSS, STRIKES AND OTHER EVENTS BEYOND OUR CONTROL

We conduct a significant portion of our activities, including manufacturing, administration and data processing at facilities located in the State of California and other seismically active areas that have experienced major earthquakes and other natural disasters. We carry limited earthquake insurance that may not be adequate or continue to be available at commercially reasonable rates and terms. A major earthquake or other disaster (such as a major fire, hurricane, flood, tsunami, volcanic eruption or terrorist attack) affecting our facilities, or those of our suppliers, could significantly disrupt our operations, and delay or prevent product manufacture and shipment during the time required to repair, rebuild or replace our or our suppliers’ damaged manufacturing facilities. These delays could be lengthy and costly. If any of our customers’ facilities are adversely affected by a disaster, shipments of our products could be delayed. Additionally, customers may delay purchases of our products until operations return to normal. Even if we are able to quickly respond to a disaster, the ongoing effects of the disaster could create some uncertainty in the operations of our businesses, such as occurred following the March 2011 tsunami in Japan. In addition, our facilities may be subject to a shortage of available electrical power and other energy supplies. Any shortages may increase our costs for power and energy supplies or could result in blackouts, which could disrupt the operations of our affected facilities and harm our business. Further, our products are typically shipped from a limited number of ports, and any

disaster, strike or other event blocking shipment from these ports could delay or prevent shipments and harm our business. In addition, concerns about terrorism, the effects of a terrorist attack, political turmoil or an outbreak of epidemic diseases, such as Ebola, could have a negative effect on our business operations, those of our suppliers and customers, and the ability to travel, resulting in adverse consequences on our revenues and financial performance.

WE WORK IN INTERNATIONAL LOCATIONS WHERE THERE ARE HIGH SECURITY RISKS, WHICH COULD RESULT IN HARM TO OUR EMPLOYEES OR CONTRACTORS OR CAUSE US TO INCUR SUBSTANTIAL COSTS

We work in some international locations where there are high security risks, which could result in harm to our employees and contractors or substantial costs. Some of our services are performed in or adjacent to high-risk locations where the country or location and surrounding area is suffering from political, social, or economic issues; war or civil unrest, or has a high level of criminal or terrorist activity. In those locations where we have employees or operations, we may incur substantial costs to maintain the safety of our personnel. Despite these precautions, the safety of our personnel in these locations may continue to be at risk, and we may in the future suffer the loss of employees and contractors, which could harm our business and operating results.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of September 30, 2016, we owned and leased a total of approximately 2.7 million square feet of floor space for office, manufacturing, research and development and other services worldwide. Our executive offices, our Oncology Systems management, some of our Oncology Systems manufacturing facilities and the GTC are located in Palo Alto, California, on approximately 30 acres of land under leasehold which expires in 2056. We own these facilities which contain approximately 481,000 square feet of space. In Crawley, England, we own approximately 2 acres of land and approximately 48,000 square feet of space used for office space and manufacturing. In Beijing, China, we have approximately 5 acres of land under leasehold that expires in 2056, and own approximately 147,000 square feet of space used for office space and manufacturing. In Jundiai, Brazil, we own approximately 4 acres of land, and we are in the process of constructing a building to be used for light assembly, office space and customer training. Our Imaging Components business is primarily located in Salt Lake City, Utah, where we own approximately 38 acres of land and approximately 495,000 square feet of space used for office space and manufacturing. Our Imaging Component business has a facility in Liverpool, New York, where we own 3 acres of land and approximately 27,000 square feet of space used for light assembly manufacturing. In Las Vegas, Nevada, we own approximately 12 acres of land and approximately 191,000 square feet of space where we manufacture our security and inspection products and have Oncology Systems customer service and support operations. The balance of our remaining facilities are leased to support our business operations worldwide.

Substantially all of this space is fully utilized for its intended purpose. We believe that our facilities and equipment are generally well maintained, in good operating condition and adequate for our present operations.

Item 3. Legal Proceedings

In 1999, we transferred our instruments business to Varian, Inc. (“VI”) and our semiconductor equipment business to Varian Semiconductor Equipment Associates, Inc. (“VSEA”) and subsequently spun off VI and VSEA, which resulted in a non-cash dividend to our stockholders (the “Spin-offs”). Under the Amended and Restated Distribution Agreement dated as of January 14, 1999 and other associated agreements that govern the Spin-offs, we retained the liabilities related to the medical systems business and agreed to manage and defend claims related to legal proceedings and environmental matters arising from corporate and discontinued operations. Generally, each of the spun-off subsidiaries is obligated to indemnify us for one third of these liabilities (after adjusting for any insurance proceeds we realize or tax benefits we receive), including certain environmental liabilities, and to indemnify us fully for liabilities arising from the operations of the business transferred to it as part of the Spin-offs. For a more detailed discussion of environmental costs and liabilities, see Note 9, "Commitments and Contingencies" to the Notes to the Consolidated Financial Statements, which is by this reference incorporated herein.

From time to time, we are involved in other legal proceedings arising in the ordinary course of our business or otherwise and, from time to time, acquired as part of business acquisitions that we make. For a detailed discussion of current material legal proceedings, see Note 9, "Commitments and Contingencies" of the Notes to the Consolidated Financial Statements, which is by this reference incorporated herein.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

VMS common stock is traded on the New York Stock Exchange (“NYSE”) under the symbol “VAR.” The following table sets forth the high and low sales prices for VMS common stock as reported in the consolidated transaction reporting system for the NYSE in fiscal years 2016 and 2015.

	High	Low
Fiscal Year 2016		
First Quarter	$82.16	$73.45
Second Quarter	$81.32	$73.18
Third Quarter	$86.24	$77.64
Fourth Quarter	$100.07	$80.73
Fiscal Year 2015		
First Quarter	$89.90	$76.73
Second Quarter	$95.70	$84.38
Third Quarter	$96.67	$83.56
Fourth Quarter	$90.78	$71.07

Since the Spin-offs in 1999, we have not paid any cash dividends on VMS common stock. We have no current plan to pay cash dividends on VMS common stock, and will review that decision periodically. Further, our existing credit agreement contains provisions that limit our ability to pay cash dividends. Specifically, dividends would not be permitted if, when aggregated with other transactions, we would not be in compliance with our financial covenants. See Note 7, "Borrowings" of the Notes to the Consolidated Financial Statements for more information.

As of November 11, 2016, there were 2,086 holders of record of VMS common stock.

PERFORMANCE GRAPH

This graph shows the total return on VMS common stock and certain indices from September 30, 2011 until the last day of fiscal year 2016.

COMPARISON OF FIVE YEAR CUMULATIVE TOTAL RETURN*
AMONG VARIAN MEDICAL SYSTEMS, INC., THE S&P 500 INDEX AND
THE S&P HEALTHCARE EQUIPMENT INDEX

*$100 invested on September 30, 2011 in stock or index, including reinvestment of dividends. Indexes are calculated based on our fiscal year-end.

	9/30/2011	9/28/2012	9/27/2013	9/26/2014	10/2/2015	9/30/2016
Varian Medical Systems, Inc.	100.00	115.64	142.22	155.10	144.15	190.82
S&P 500	100.00	130.20	155.39	186.05	184.91	213.44
S&P Health Care Equipment	100.00	123.38	141.79	172.63	187.23	245.56

The performance graph and related information shall not be deemed to be soliciting material or to be “filed” with the SEC or to be deemed to be incorporated by reference to any filing under the Securities Act or the Exchange Act.

Share Repurchase Program

The following table provides information with respect to the shares of VMS common stock repurchased by VMS during the fourth quarter of fiscal year 2016 (in millions, except per share price).

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs [1]
July 2, 2016 – July 29, 2016[2]	1.0	$ 87.13	1.0	3.8
July 30, 2016 – August 26, 2016	—	$ —	—	3.8
August 27, 2016 – September 30, 2016	—	$ —	—	3.8
Total	1.0	$ 87.13	1.0	3.8

(1) In November 2015, the VMS Board of Directors authorized the repurchase of 8.0 million shares of VMS common stock through December 31, 2016. Share repurchases may be made in the open market, in privately negotiated transactions including accelerated share repurchase ("ASR") programs, or in Rule 10b5-1 share repurchase plans, and also may be made from time to time or in one or more larger blocks. In November 2016, the VMS Board of Directors authorized the repurchase of additional 8.0 million shares of VMS common stock commencing on January 1, 2017.

(2) Includes 0.5 million shares of VMS common stock received as part of an ASR agreement with J.P. Morgan Chase Bank, N.A. (“J.P. Morgan”). See Note 11, "Stockholders' Equity and Noncontrolling Interests" of the Notes to the Consolidated Financial Statements for further discussion.

The preceding table excludes an immaterial number of shares of VMS common stock that were tendered to VMS in satisfaction of tax withholding obligations upon the vesting of restricted stock units granted under our employee stock plans.

Item 6. Selected Financial Data

The following financial data should be read in conjunction with our consolidated financial statements and the accompanying notes and the MD&A included elsewhere herein.

Summary of Operations:	Fiscal Years [1]				
(In millions, except per share amounts)	2016	2015	2014	2013	2012
Revenues	$3,217.8	$3,099.1	$3,049.8	$2,942.9	$2,807.0
Earnings before taxes [2]	556.4	554.7	574.5	612.0	595.9
Taxes on earnings	153.7	142.7	170.8	173.8	168.9
Net earnings	402.7	412.0	403.7	438.2	427.0
Less: Net earnings attributable to noncontrolling interests	0.4	0.5	—	—	—
Net earnings attributable to Varian	$402.3	$411.5	$403.7	$438.2	$427.0
Net earnings per share attributable to Varian					
Net earnings per share - basic	$4.22	$4.13	$3.88	$4.04	$3.83
Net earnings per share - diluted	$4.19	$4.09	$3.83	$3.98	$3.76
Financial Position at Fiscal Year End:					
Working capital [3]	$1,002.0	$1,016.3	$1,177.3	$1,429.5	$821.1
Total assets [3]	3,816.0	3,578.7	3,338.7	3,458.2	2,870.6
Long-term debt (including current maturities)	337.5	387.5	437.5	506.3	6.3
Short-term borrowings	329.6	108.4	—	—	155.0
Total equity	$1,744.2	$1,726.3	$1,616.4	$1,713.8	$1,509.8

(1) Our fiscal years as reported are the 52- or 53-weeks periods ending on the Friday nearest September 30. Fiscal years 2016, 2014, 2013 and 2012 each included 52 weeks. Fiscal year 2015 included 53 weeks.

(2) Earnings before taxes included $16.9 million in costs relating to the separation of Imaging Components business and a $25.1 million litigation charge related to a settlement agreement with the University of Pittsburgh, in fiscal years 2016 and 2014, respectively.

(3) Working capital and total assets have been adjusted for fiscal years 2015, 2014, 2013, and 2012 as the result of our adoption of the accounting guidance related to balance sheet classification of deferred taxes. See "Accounting Pronouncements Recently Adopted" in Note 1, "Summary of Significant Accounting Policies" in the Notes to Consolidated Financial Statements for further information.

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

Separation

On May 23, 2016, we announced our intention to separate our Imaging Components business from the remainder of our businesses through a pro rata distribution of the common stock of a new entity, named Varex Imaging Corporation ("Varex"). Varex was incorporated in Delaware on July 18, 2016 for the purpose of holding the assets and liabilities associated with the Imaging Components business. Following the separation and distribution, Varex will be an independent, publicly traded company. The distribution is subject to certain conditions, including, among others, final approval of the Varian board of directors, receipt of one or more opinions with respect to certain U.S. federal income tax matters relating to the separation and the SEC declaring the effectiveness of the registration statement. There can be no assurance regarding the ultimate timing of the proposed transaction.

Separation costs include expenses for transaction advisory services, consulting services, restructuring and other expenses. During fiscal year 2016, we incurred $16.9 million of costs relating to the separation of our Imaging Components business, of which approximately $14 million relates to transaction advisory services. We expect to incur an estimated $21 million in charges for transaction advisory services in fiscal year 2017. Further, we expect to incur significant additional expenses for consulting services, restructuring, and other expenses to complete the separation.

Overview

Our operations are currently grouped into two reportable operating segments: Oncology Systems and Imaging Components. Our GTC and VPT business are reflected in the "Other" category because these operating segments do not meet the criteria of a reportable operating segment. The operating segments were determined based on how our Chief Executive Officer, who is our CODM, views and evaluates our operations. The CODM allocates resources to and evaluates the financial performance of each operating segment primarily based on operating earnings.

Total revenues increased 4%, gross margin increased 0.9 percentage points, net earnings attributable to Varian decreased 2%, and diluted net earnings per share increased 2% in fiscal year 2016 over fiscal year 2015. Our effective tax rate increased to 27.6% in fiscal year 2016 from 25.7% in fiscal year 2015. We repurchased 5.7 million shares of VMS common stock totaling $461.3 million in fiscal year 2016.

Gross orders increased 1% in Oncology Systems and decreased 6% in Imaging Components in fiscal year 2016, as compared to fiscal year 2015. We also recorded gross orders of $104.7 million in the "Other" category in fiscal year 2016, as compared to $317.2 million in fiscal year 2015. Our backlog at the end of fiscal year 2016 was $3.5 billion, or 1% lower, as compared to the end of fiscal year 2015.

In order to assist with the assessment of how our underlying businesses performed, we compare the percentage change in revenues and gross orders from one period to another, excluding the effect of foreign currency fluctuations (i.e., using constant currency exchange rates). To present this information on a constant currency basis, we convert current period revenues and gross orders in currencies other than U.S. Dollars into U.S. Dollars using the comparable prior period's average exchange rate.

The U.S. Dollar strengthened against the Euro and weakened against the Japanese Yen in fiscal year 2016, compared to the year-ago period, but did not have a significant impact on total revenues and Oncology Systems gross orders. We expect that fluctuations of non-U.S. Dollar currencies against the U.S. Dollar will continue to cause variability in our financial performance.

In December 2015, the U.S. President signed into law the Protecting Americans from Tax Hikes Act of 2015 ("PATH Act"), which suspended the 2.3% medical device excise tax implemented as part of the Patient Protection and Affordable Care Act (the "Affordable Care Act") for a two-year period through December 31, 2017. The suspension of the medical device excise tax had a positive impact on our gross margin in fiscal year 2016 compared to fiscal year 2015. We expect the suspension to have a positive impact on our gross margin in fiscal year 2017 compared to fiscal year 2016 because the suspension was not effective during the first quarter of fiscal year 2016. Additionally, the PATH Act permanently extended the research and development ("R&D") tax credit, which has a favorable impact on our effective tax rate.

The Americas region includes North America (primarily United States and Canada) and Latin America. The EMEA region includes Europe, Russia, the Middle East, India and Africa. The APAC region primarily includes East and

Southeast Asia and Australia.

Oncology Systems. Our largest business segment is Oncology Systems, which designs, manufactures, sells and services hardware and software products for treating cancer with conventional radiation therapy and advanced treatments such as, IMRT, IGRT, VMAT, SRS, SBRT and brachytherapy, as well as informatics software for information management, clinical knowledge exchange, patient care management, practice management and decision-making support for comprehensive cancer clinics, radiotherapy centers and medical oncology practices.

Our primary goal in the Oncology Systems business is to promote the adoption of more advanced and effective cancer treatments. In our view, the fundamental market forces that drive long-term growth in our Oncology Systems business are the rise in cancer cases; technology advances and product developments that are leading to improvements in patient care; customer demand for the more advanced and effective cancer treatments that we enable; competitive conditions among hospitals and clinics to offer such advanced treatments; continued improvement in safety and cost efficiency in delivering radiation therapy; and underserved medical needs outside of the United States. Over the last few years, we have seen a greater percentage of Oncology Systems gross orders and revenues coming from emerging markets within our international region, which typically purchase lower-priced products, which generally have lower gross margin percentages, compared to developed markets. We have also seen an increased portion of gross orders and revenues coming from services and software licenses, both of which have higher gross margin percentages than our hardware products. We have also been investing a higher portion of our Oncology Systems research and development budget in software and software-related products.

The radiation oncology market in North America is largely characterized by replacements of older machines, with periodic increases in demand driven by the introduction of new technologies. Reimbursement rates in the United States have generally supported a favorable return on investment for the purchase of new radiotherapy equipment and technologies. While we believe that improved product functionality, greater cost-effectiveness and prospects for better clinical outcomes with new capabilities such as IMRT, IGRT and VMAT tend to drive demand for radiotherapy products, large changes in reimbursement rates or reimbursement structure can affect customer demand and cause market shifts. We do not know what impact the Affordable Care Act or its potential repeal, or changes in administration and policy resulting from the recent U.S. presidential election, will have on long-term growth or demand for our products and services. We believe, however, that growth of the radiation oncology market in the United States is being impacted as customers' decision-making processes are complicated by the uncertainties surrounding MACRA and the Affordable Care Act and reimbursement rates for radiotherapy and radiosurgery, and that this uncertainty will continue in future fiscal years. We also believe that the Affordable Care Act, Accountable Care Organizations and bundled payment arrangements are causing healthcare providers to re-evaluate their business models and we are seeing increased consolidation of hospitals and clinics and more integration of systems and equipment across multi-site healthcare networks, which is impacting transaction size, timing and purchasing processes, and also contributing to the increased business variability.

In the radiation oncology markets outside of North America, we expect the EMEA market to grow over the long-term with mixed performance across the region. In APAC, we expect China to lead longer term regional growth, off-setting a slower Japanese market. Latin America is currently experiencing volatility, however, our long-term outlook is cautiously optimistic. Overall, we believe the global radiation oncology market can grow over the long-term, on average and in constant currencies, in the mid-single-digit range.

In September 2016, we closed the acquisition of the radiotherapy business of Candela, our distributor of radiotherapy equipment in Poland, for a total purchase consideration of $35.2 million. We acquired this business to strengthen our market position in Poland. See Note 15, "Business Combinations" of the Notes to the Consolidated Financial Statements for further discussion.

Oncology Systems total revenues increased 5% in fiscal year 2016, as compared to fiscal year 2015. Oncology Systems gross margin percentage increased 1.7 percentage points in fiscal year 2016 from fiscal year 2015. Oncology Systems gross orders increased 1% in fiscal year 2016, as compared to fiscal year 2015, with an increase of 5% from North America, offset by a decrease of 2% from our international regions.

Imaging Components. Our Imaging Components business segment designs, manufactures, sells and services X-ray imaging components for use in a range of applications, including radiographic or fluoroscopic imaging, mammography, special procedures, computed tomography, computer-aided diagnostics, and industrial applications.

We provide a broad range of X-ray imaging components including X-ray tubes, flat panel digital image detectors, high voltage connectors, image processing software and workstations, computer-aided diagnostic software, collimators and automatic exposure control devices. Our Imaging Components business segment also designs, manufactures, sells and services security and inspection products, which include Linatron X-ray accelerators, imaging processing software and image detection products for security and inspection purposes, such as cargo screening at ports and borders and nondestructive examination in a variety of applications. We continue to view the long-term fundamental growth driver for this business to be the ongoing success of key X-ray imaging OEMs that

incorporate our products into their medical diagnostic, dental, veterinary, security and industrial imaging systems. Orders and revenues for our security and inspection products have been and may continue to be unpredictable as governmental agencies may place large orders with us or our OEM customers in a short time period, and then may not place any orders for a long time period thereafter.

Our success in Imaging Components depends upon our ability to anticipate changes in our markets, the direction of technological innovation and the demands of our customers. A significant portion of our Imaging Components customers are outside of the United States and products in this business are generally priced in U.S. Dollars. As a result, the demand for Imaging Components products has been negatively impacted by the strengthening of the U.S. Dollar, which began in the fourth quarter of fiscal year 2014, and this has caused our products to be priced higher compared to products sold in non-U.S. Dollar currencies. In addition, some customers have asked for additional discounts, delayed purchasing decisions, or moved to in-sourcing supply of such components or migrated to lower cost alternatives.

In the event of a continued strengthening of the U.S. Dollar, we expect that demand and pricing will continue to be negatively impacted for Imaging Component products. The market for border protection systems has slowed significantly and end customers, particularly in oil-based economies and war zones in which we have a significant customer base, are delaying tenders, resulting in a decline in the demand for security and inspection products.

In fiscal year 2016, Imaging Components revenues decreased 2% and gross orders decreased 6% as compared to fiscal year 2015. Imaging Components gross margin percentage increased 0.6 percentage points in fiscal year 2016 as compared to fiscal year 2015.

Other. The “Other” category is comprised of VPT and the operations of GTC.

VPT develops, designs, manufactures, sells and services products and systems for delivering proton therapy, another form of external beam radiotherapy using proton beams, for the treatment of cancer. GTC is our scientific research facility. Subsequent to fiscal year 2016, GTC was absorbed into primarily our Oncology Systems and Imaging Components businesses and is no longer a separate business.

The “Other” category revenues increased $19.2 million in fiscal year 2016, as compared to fiscal year 2015.

This discussion and analysis of our financial condition and results of operations is based upon and should be read in conjunction with the Consolidated Financial Statements and the Notes included elsewhere in this Annual Report on Form 10-K, as well as the information contained under Item 1A, “Risk Factors.” We discuss our results of operations below.

Critical Accounting Estimates

The preparation of our financial statements and related disclosures in conformity with accounting principles generally accepted in the United States (“GAAP”) requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. These estimates and assumptions are based on historical experience and on various other factors that we believe are reasonable under the circumstances. We periodically review our accounting policies, estimates and assumptions and make adjustments when facts and circumstances dictate. In addition to the accounting policies that are more fully described in the Notes to the Consolidated Financial Statements included in this Annual Report on Form 10-K, we consider the critical accounting policies described below to be affected by critical accounting estimates. Our critical accounting policies that are affected by accounting estimates include revenue recognition, share-based compensation expense, valuation of allowance for doubtful accounts, impairment of investments and notes receivable, valuation of inventories, assessment of recoverability of goodwill and intangible assets, valuation of warranty obligations, assessment of loss contingencies, valuation of defined benefit pension and post-retirement benefit plans, valuation of derivative instruments and taxes on earnings. Such accounting policies require us to use judgments, often as a result of the need to make estimates and assumptions regarding matters that are inherently uncertain, and actual results could differ materially from these estimates. For a discussion of how these estimates and other factors may affect our business, see Item 1A, “Risk Factors.”

Revenue Recognition

Our revenues are derived primarily from the sale of hardware and software products, and services from our Oncology Systems, Imaging Components and VPT businesses. We recognize revenues net of any value added or sales tax and net of sales discounts.

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We frequently enter into sales arrangements with customers that contain multiple elements or deliverables such as hardware, software and services. Judgments as to the allocation of consideration from an arrangement to the multiple elements of the arrangement, and the appropriate timing of revenue recognition are critical with respect to these arrangements to ensure compliance with GAAP.

The allocation of consideration in a multiple element arrangement is affected by the determination of whether any software deliverables that function together with other hardware components to deliver the hardware products' essential functionality are considered as non-software products for purpose of revenue recognition. The allocation of consideration to each non-software deliverable is based on the assumptions we use to establish its selling price, which are based on vendor-specific objective evidence ("VSOE") of selling price, if it exists, otherwise, third-party evidence of selling price, if it exists, and, if not, on estimated selling prices. In addition, the allocation of consideration to each software deliverable in a multiple element arrangement is affected by our judgment as to whether VSOE of its fair value exists in these arrangements.

Changes to the elements in an arrangement and the amounts allocated to each element could affect the timing and amount of revenue recognition. Revenue recognition also depends on the timing of shipment, readiness of customers' facilities for installation, installation requirements, and availability of products or customer acceptance terms. If shipments or installations are not made on scheduled timelines or if the products are not accepted by the customer in a timely manner, our reported revenues may differ materially from expectations.

Service revenues include revenues from hardware service contracts, software service agreements, bundled support arrangements, paid services and trainings, and parts that are sold by the service department. Revenues allocated to service contracts are generally recognized ratably over the period of the related contracts.

In addition, revenues related to proton therapy systems and proton therapy system commissioning contracts are recognized in accordance with contract accounting. We recognize contract revenues under the percentage-of-completion method which are based on contract costs incurred to date compared with total estimated contract costs. Changes in estimates of total contract revenue, total contract cost or the extent of progress towards completion are recognized in the period in which the changes in estimates are identified. Estimated losses on contracts are recognized in the period in which the loss is identified. In circumstances in which the final outcome of a contract cannot be precisely estimated but a loss on the contract is not expected, we recognize revenues under the percentage-of-completion method based on a zero profit margin until more precise estimates can be made. If and when we can make more precise estimates, revenues and costs of revenues are adjusted in the same period. Because the percentage-of-completion method involves considerable use of estimates in determining revenues, costs and profits and in assigning the dollar amounts to relevant accounting periods, and because the estimates must be periodically reviewed and appropriately adjusted, if our estimates prove to be inaccurate or circumstances change over time, we may be forced to adjust revenues or even record a contract loss in later periods.

Share-based Compensation Expense

We grant restricted stock units, deferred stock units, performance units, and stock options to employees and permit employees to purchase shares under the VMS employee stock purchase plan. We value our stock options granted and the option component of the shares of VMS common stock purchased under the employee stock purchase plan using the Black-Scholes option-pricing model. We value our performance units using the Monte Carlo simulation model.

The determination of fair value of share-based payment awards on the date of grant under both the Black-Scholes option-pricing model and the Monte Carlo simulation model is affected by VMS's stock price, as well as the input of other subjective assumptions, including the expected terms of share-based awards and the expected price volatilities of shares of VMS common stock and peer companies that are used to assess certain performance targets over the expected term of the awards, and the expected dividend yield of shares of VMS common stock.

The expected term of our stock options is based on the observed and expected time to post-vesting exercise and post-vesting cancellations of stock options by our employees. We use a blended volatility in deriving the expected volatility assumption for our stock options. Blended volatility represents the weighted average of implied volatility and historical volatility. Implied volatility is derived based on traded options on VMS common stock. Implied volatility is weighted in the calculation of blended volatility based on the ratio of the term of the exchange-traded options to the expected terms of the employee stock options. Historical volatility represents the remainder of the

weighting. Our decision to incorporate implied volatility was based on our assessment that implied volatility of publicly traded options on VMS common stock is reflective of market conditions and is generally reflective of both historical volatility and expectations of how future volatility will differ from historical volatility. In determining the extent of use of implied volatility, we considered: (i) the volume of market activity of traded options; (ii) the ability to reasonably match the input variables of traded options to those of stock options granted by us, including the date of grant; (iii) the similarity of the exercise prices; and (iv) the length of term of traded options. After considering the above

factors, we determined that we could not rely exclusively on implied volatility based on the fact that the term of VMS exchange-traded options is less than one year and that it is different from the expected terms of the stock options we grant. Therefore, we believe a combination of the historical volatility over the expected terms of the stock options we grant and the implied volatility of exchange-traded options best reflects the expected volatility of VMS common stock. In determining the grant date fair value of our performance units, historical volatilities of shares of VMS common stock, as well as the shares of common stock of peer companies, were used to assess certain performance targets. The risk-free interest rate assumption is based upon observed interest rates appropriate for the term of our stock awards. The dividend yield assumption is based on our history and expectation of no dividend payouts. If factors change and we employ different assumptions in future periods, the compensation expense that we record may differ significantly from what we have recorded in the current period. In addition, we are required to estimate the expected forfeiture rate, as well as the probability that certain performance conditions that affect the vesting of performance units will be achieved, and recognize expense only for those awards expected to vest. If the actual forfeiture rate and/or the actual number of performance units that vest based on achievement of performance conditions are materially different from our estimates, the share-based compensation expense could be significantly different from what we have recorded in the current period.

Allowance for Doubtful Accounts

We evaluate the creditworthiness of our customers prior to authorizing shipment for all major sale transactions. Except for government tenders, group purchases and orders with letters of credit in Oncology Systems and for security and inspection products, our payment terms usually require payment of a small portion of the total amount due when the customer signs the purchase order, a significant amount upon transfer of risk of loss to the customer and the remaining amount upon completion of the installation. On a quarterly basis, we evaluate aged items in the accounts receivable aging report and provide an allowance in an amount we deem adequate for doubtful accounts. If our evaluation of our customers' financial conditions does not reflect our future ability to collect outstanding receivables, additional provisions may be needed and our operating results could be negatively affected.

Impairment of Investments and Notes Receivable

We recognize an impairment charge when the declines in the fair values of our available-for-sale investments below their cost basis are determined to be other than temporary impairments ("OTTI"). Our available-for-sale investments primarily include CPTC loans. We monitor our available-for-sale investments for possible OTTI on an ongoing basis. When there has been a decline in fair value of a debt security below the amortized cost basis, we recognize OTTI if: (i) we have the intention to sell the security; (ii) it is more likely than not that we will be required to sell the security before recovery of the entire amortized cost basis; or (iii) we do not expect to recover the entire amortized cost basis of the security. We assess the fair value of the CPTC loans, which is classified in the level 3 fair value hierarchy based on the income approach by using the discounted cash flow model with key assumptions that include discount rates corresponding to the terms and risks associated with the loans to CPTC (see Note 3, "Fair Value" of the Notes to the Consolidated Financial Statements).

We also have investments in privately-held companies, some of which are in the startup or development stages. We monitor these investments for events or circumstances indicative of potential impairment, and we make appropriate reductions in carrying values if we determine that an impairment charge is required, based primarily on the financial condition, near-term prospects and recent financing activities of the investee. These investments are inherently risky because the markets for the technologies or products these companies are developing are typically in the early stages and may never materialize.

At times, we advance notes to third parties, including our customers. We regularly assess these notes for collectability by considering internal factors such as historical experience, credit quality, age of the note balances as well as external factors such as economic conditions that may affect the note holder's ability to pay.

Our ongoing consideration of all the factors described above could result in impairment charges in the future, which could adversely affect our operating results.

Inventories

Our inventories include high technology parts and components that are highly specialized in nature and that are subject to rapid technological obsolescence. We have programs to minimize the required inventories on hand and we regularly review inventory quantities on hand and on order and adjust for excess and obsolete inventory based primarily on historical usage rates and our estimates of product demand and production. Actual demand may differ from our estimates, in which case we may have

understated or overstated the provision required for obsolete and excess inventory, which would have an impact on our operating results.

Goodwill and Intangible Assets

Goodwill is initially recorded when the purchase price paid for a business acquisition exceeds the estimated fair value of the net identified tangible and intangible assets acquired. Our future operating performance will be impacted by the future amortization of these acquired intangible assets and potential impairment charges related to these intangibles or to goodwill if indicators of impairment exist. The allocation of the purchase price from business acquisitions to goodwill and intangible assets could have a significant impact on our future operating results. In addition, the allocation of the purchase price of the acquired businesses to goodwill and intangible assets requires us to make significant estimates and assumptions, including estimates of future cash flows expected to be generated by the acquired assets and the appropriate discount rate for those cash flows. Should conditions differ from management's estimates at the time of the acquisition, material write-downs of intangible assets and/or goodwill may be required, which would adversely affect our operating results.

We evaluate goodwill for impairment at least annually or whenever an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. The evaluation includes consideration of qualitative factors including industry and market considerations, overall financial performance, and other relevant events and factors affecting the reporting unit. If we determine that a quantitative analysis is necessary, the impairment test for goodwill is a two-step process. Step one consists of a comparison of the fair value of a reporting unit against its carrying amount, including the goodwill allocated to each reporting unit. We determine the fair value of our reporting units based on a combination of income and market approaches. The income approach is based on the present value of estimated future cash flows of the reporting units and the market approach is based on a market multiple calculated for each business unit based on market data of other companies engaged in similar business. If the carrying amount of the reporting unit is in excess of its fair value, step two requires the comparison of the implied fair value of the reporting unit's goodwill against the carrying amount of the reporting unit's goodwill. Any excess of the carrying value of the reporting unit's goodwill over the implied fair value of the reporting unit's goodwill is recorded as an impairment loss. The impairment test for intangible assets with indefinite useful lives, if any, consists of a comparison of fair value to carrying value, with any excess of carrying value over fair value being recorded as an impairment loss.

We have four reporting units with goodwill: (i) Oncology Systems, (ii) X-ray tubes and flat panel products, (iii) Security and inspection products, and (iv) VPT. For all four reporting units, based upon the most recent annual goodwill analysis that we performed during the fourth quarter of fiscal year 2016, either step one of the impairment test was not completed based on evaluation of qualitative factors or, for those for which step one was completed, the fair value was substantially in excess of carrying value. However, significant changes in our projections about our operating results or other factors could cause us to make interim assessments of impairments in any quarter that could result in some or all of the goodwill being impaired. For our VPT reporting unit in particular, which had $49.8 million in goodwill as of September 30, 2016, our estimates as to future operating results include certain assumptions about factors that cannot be predicted with certainty, including future market conditions, revenue growth rates, and operating margins.

We will continue to make assessments of impairment on an annual basis or more frequently if indicators of potential impairment arise.

Warranty Obligations

We warrant most of our products for a specific period of time, usually 12 months from installation, against material defects. We provide for the estimated future costs of warranty obligations in cost of revenues when the related revenues are recognized. The accrued warranty costs represent our best estimate at the time of sale of the total costs that we will incur to repair or replace product parts that fail while still under warranty. The amount of accrued estimated warranty costs obligation for established products is primarily based on historical experience as to product failures adjusted for current information on repair costs. For new products, estimates will include historical experience of similar products, as well as reasonable allowance for start-up expenses. Actual warranty costs could differ from the

estimated amounts. On a quarterly basis, we review the accrued balances of our warranty obligations and update the historical warranty cost trends, if required. If we were required to accrue additional warranty costs in the future, it would have a negative effect on our operating results.

Loss Contingencies

From time to time, we are a party to or otherwise involved in legal proceedings, claims and government inspections or investigations or other legal matters, both inside and outside the United States, arising in the ordinary course of our business or

otherwise. We accrue amounts, to the extent they can be reasonably estimated, that we believe are adequate to address any liabilities related to legal proceedings and other loss contingencies that we believe will result in a probable loss. Such matters are subject to many uncertainties, outcomes are not predictable with assurance, and actual liabilities could significantly exceed our estimates of potential liabilities. In addition, we are subject to a variety of environmental laws around the world. Those laws regulate multiple aspects of our operations, including the handling, storage, transport and disposal of hazardous substances. They impose costs on our operations. In connection with our past and present operations and facilities, we record environmental remediation liabilities when we conclude that environmental assessments or remediation efforts are probable and we believe we can reasonably estimate the costs of those efforts. Our accrued environmental costs represent our best estimate of the total costs of assessments and remediation and the time period over which we expect to incur those costs. We review these accrued balances quarterly. If we were required to increase or decrease the accrued environmental costs in the future, it would adversely or favorably impact our operating results.

Defined Benefit Pension Plans

We sponsor seven defined benefit pension plans in Germany (where we have three defined benefit pension plans), Japan, Switzerland, the Philippines and the United Kingdom covering employees who meet the applicable eligibility requirements in these countries. Several statistical and other factors that attempt to anticipate future events are used in calculating the expenses and liabilities related to the aforementioned plans. These factors include assumptions about the discount rate, expected return on plan assets, and rate of future compensation increases, all of which we determine within certain guidelines. In addition, we also use assumptions, such as withdrawal and mortality rates, to calculate the expenses and liabilities. The actuarial assumptions we use are long-term assumptions and may differ materially from actual experience particularly in the short term due to changing market and economic conditions and changing participant demographics. These differences may have a significant impact on the amount of defined benefit pension plan expenses we record.

The expected rates of return on the various defined benefit pension plans’ assets are based on the asset allocation of each plan and the long-term projected return on those assets. The discount rate enables us to state expected future cash flows at a present value on the measurement date. The discount rates used for defined benefit plans are primarily based on the current effective yield of long-term corporate bonds that are of high quality with satisfactory liquidity and credit rating with durations corresponding to the expected durations of the benefit obligations. A change in the discount rate may cause the present value of benefit obligations to change significantly. The net liabilities recognized for defined benefit pension plans increased by $19.8 million in fiscal year 2016 to $40.2 million at September 30, 2016, primarily due to a decrease in the discount rate. See Note 10, "Retirement Plans" in the Notes to the Consolidated Financial Statements for further information.

Valuation of Derivative Instruments

We use foreign currency forward contracts to reduce the effects of currency rate fluctuations on sales transactions denominated in foreign currencies and on assets and liabilities denominated in foreign currencies. These foreign currency forward contracts are derivative instruments and are measured at fair value. There are three levels of inputs that may be used to measure fair value (see Note 3, "Fair Value" of the Notes to the Consolidated Financial Statements). The fair value of foreign currency forward contracts are calculated primarily using Level 2 inputs, which include currency spot and forward rates, interest rate and credit or non-performance risk. The spot rate for each currency is the same spot rate used for all balance sheet translations at the measurement date and sourced from our major trading banks. The forward point values for each currency and the London Interbank Offered Rate (“LIBOR”) to discount assets and liabilities are interpolated from commonly quoted broker services. One year credit default swap spreads of the counterparty at the measurement date are used to adjust derivative assets, all of which mature in 13 months or less, for non-performance risk. We are required to adjust derivative liabilities to reflect the potential non-performance risk to lenders based on our incremental borrowing rate. Each contract is individually adjusted using the counterparty credit default swap rates (for net assets) or our borrowing rate (for net liabilities). The use of Level 2 inputs in determining fair values requires certain management judgment and subjectivity. Changes to these Level 2 inputs could have a material impact on the valuation of our derivative instruments, as well as on our result of operations. There were no transfers of assets or liabilities between fair value measurement levels during fiscal years

2016, 2015 and 2014.

Taxes on Earnings

We are subject to taxes on earnings in both the United States and numerous foreign jurisdictions. As a global taxpayer, significant judgments and estimates are required in evaluating our tax positions and determining our provision for taxes on earnings. We account for uncertainty in income taxes following a two-step approach for recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining whether the weight of available evidence indicates that it is more likely than not that, based on the technical merits, the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest

amount that is more than 50% likely of being realized upon settlement. Recognition and measurement are based on management's best judgment given the facts, circumstances and information available at the end of the accounting period.

Generally, the carrying value of our net deferred tax assets assumes that we will be able to generate sufficient future taxable earnings in the applicable tax jurisdictions to utilize these deferred tax assets. Should we conclude it is more likely than not that we will be unable to recover our net deferred tax assets in these tax jurisdictions, we would increase our valuation allowance and our tax provision would increase in the period in which we make such a determination.

Our foreign earnings are generally taxed at rates lower than U.S. rates. Our effective tax rate is impacted by existing tax laws in both the United States and in the respective countries in which our foreign subsidiaries do business. In addition, a decrease in the percentage of our total earnings from foreign countries, or a change in the mix of foreign countries among particular tax jurisdictions could increase or decrease our effective tax rate. Our current effective tax rate does not assume U.S. taxes on certain undistributed profits of certain foreign subsidiaries. These earnings could become subject to incremental foreign withholding or U.S. federal and state taxes should they either be remitted or deemed to be remitted to the United States.

Results of Operations

Fiscal Year

Our fiscal year is the 52- or 53-week period ending on the Friday nearest September 30. Fiscal year 2016 was the 52-week period ended September 30, 2016, fiscal year 2015 was the 53-week period ended October 2, 2015, and fiscal year 2014 was the 52-week period ended on September 26, 2014. Set forth below is a discussion of our results of operations for fiscal years 2016, 2015 and 2014.

Discussion of Results of Operations for Fiscal Years 2016, 2015 and 2014

Total Revenues

Revenues by sales classification	Fiscal Years				
(Dollars in millions)	2016	Percent Change	2015	Percent Change	2014
Product	$2,142.3	3 %	$2,077.9	— %	$2,083.8
Service	1,075.5	5 %	1,021.2	6 %	966.0
Total Revenues	$3,217.8	4 %	$3,099.1	2 %	$3,049.8
Product as a percentage of total revenues	67 %		67 %		68 %
Service as a percentage of total revenues	33 %		33 %		32 %

Total revenues increased in fiscal year 2016 over fiscal year 2015 due to an increase in revenues from Oncology Systems, and to a lesser extent, an increase in revenues from the "Other" category, partially offset by a decrease in revenues from Imaging Components. Total revenues increased in fiscal year 2015 over fiscal year 2014 primarily due to an increase in revenues from the “Other” category, partially offset by a decrease in revenues from Imaging Components.

Product revenues increased in fiscal year 2016 over fiscal year 2015 due to an increase in revenues from Oncology Systems, and to a lesser extent, an increase in revenues from the "Other" category, partially offset by a decrease in revenues from Imaging Components. Product revenues were flat in fiscal year 2015 over fiscal year 2014 due to decreases in revenues from Imaging Components and Oncology Systems, offset by an increase in revenues from the “Other” category.

Service revenues increased in fiscal year 2016 over fiscal year 2015, primarily due to an increase in revenues from Oncology Systems, and to a lesser extent, an increase in revenues from Imaging Components. Service revenues increased in fiscal year 2015 over fiscal year 2014, primarily due to an increase in revenues from Oncology Systems.

Revenues by region	Fiscal Years							
(Dollars in millions)	2016	Percent Change	Constant Currency [1]	2015	Percent Change	Constant Currency	2014	
Americas	$1,486.6	(4)%	(4)%	$1,546.0	9 %	10 %	$1,416.5	
EMEA	1,004.2	13 %	16 %	886.4	(2)%	8 %	908.5	
APAC	727.0	9 %	10 %	666.7	(8)%	(3)%	724.8	
Total Revenues	$3,217.8	4 %	5 %	$3,099.1	2 %	6 %	$3,049.8	
North America	$1,394.3	(4)%	(4)%	$1,456.5	9 %	10 %	$1,332.5	
International [2]	1,823.5	11 %	13 %	1,642.6	(4)%	4 %	1,717.3	
Total Revenues	$3,217.8	4 %	5 %	$3,099.1	2 %	6 %	$3,049.8	
North America as a percentage of total revenues	43 %			46 %			43 %	
International as a percentage of total revenues	57 %			54 %			57 %	

(1) Constant currency is the percent change excluding the effect of foreign currency fluctuations against the U.S. Dollar.

(2) We consider international revenues to be revenues outside of North America.

The Americas revenues decreased in fiscal year 2016 over fiscal year 2015 due to a decrease in revenues from the “Other” category, and to a lesser extent, a decrease in revenues from Imaging Components, partially offset by an increase in revenues from Oncology Systems. The Americas revenues increased in fiscal year 2015 over fiscal year 2014 due to increases in revenues from the “Other” category and Oncology Systems, partially offset by a decrease in revenues from Imaging Components.

EMEA revenues increased in fiscal year 2016 over fiscal year 2015 due to increases in revenues from the "Other" category, Oncology Systems and Imaging Components. EMEA revenues decreased in fiscal year 2015 over fiscal year 2014 primarily due to a decrease in revenues from Imaging Components, partially offset by an increase in revenues from the “Other” category.

APAC revenues increased in fiscal year 2016 over fiscal year 2015 due to an increase in revenues from Oncology Systems, and to a lesser extent, an increase in revenues from the “Other” category, partially offset by a decrease in revenues from Imaging Components. APAC revenues decreased in fiscal year 2015 over fiscal year 2014 due to a decrease in revenues from Oncology Systems, and to a lesser extent, decreases in revenues from Imaging Components and from the “Other” category.

Oncology Systems Revenues

Revenues by sales classification	Fiscal Years							
(Dollars in millions)	2016	Percent Change	Constant Currency	2015	Percent Change	Constant Currency	2014	
Product	$1,429.5	5 %	6 %	$1,356.5	(4)%	2 %	$1,406.0	
Service	1,027.6	4 %	5 %	987.5	5 %	11 %	938.2	
Total Oncology Systems Revenues	$2,457.1	5 %	6 %	$2,344.0	— %	6 %	$2,344.2	
Product as a percentage of Oncology Systems revenues	58 %			58 %			60 %	
Service as a percentage of Oncology Systems revenues	42 %			42 %			40 %	
Oncology Systems revenues as a percentage of total revenues	76 %			76 %			77 %	

Oncology systems product revenues increased in fiscal year 2016 over fiscal year 2015 primarily due to increases in revenues from hardware products and software licenses. Our hardware products revenue increased due to product mix.

Oncology

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Systems product revenues decreased in fiscal year 2015 over fiscal year 2014 primarily due to a decrease in revenues from hardware products as a result of strategic pricing and an unfavorable foreign currency impact, partially offset by an increase in revenues from software licenses.

Oncology Systems service revenues increased in fiscal year 2016 over fiscal year 2015 and in fiscal year 2015 over fiscal year 2014, primarily due to increased customer adoption of service contracts as the warranty period on our TrueBeam systems expire and by an increased number of customers as the installed base of our products continues to grow. The extra week of operations in fiscal year 2015 contributed approximately an additional $7 million in Oncology Systems service revenues.

Revenues by region	Fiscal Years								
(Dollars in millions)	2016	Percent Change	Constant Currency	2015	Percent Change	Constant Currency	2014
Americas	$1,228.9	2 %	2 %	$1,209.3	4 %	4 %	$1,165.5
EMEA	739.3	5 %	9 %	703.9	—%	13 %	701.1
APAC	488.9	13 %	12 %	430.8	(10)%	(2)%	477.6
Total Oncology System Revenues	$2,457.1	5 %	6 %	$2,344.0	— %	6 %	$2,344.2
North America	$1,144.8	1 %	2 %	$1,128.2	4 %	4 %	$1,088.2
International	1,312.3	8 %	10 %	1,215.8	(3)%	7 %	1,256.0
Total Oncology System Revenues	$2,457.1	5 %	6 %	$2,344.0	— %	6 %	$2,344.2
North America as a percentage of total Oncology Systems revenues	47 %			49 %			47 %
International as a percentage of total Oncology Systems revenues	53 %			51 %			53 %

The Americas Oncology Systems revenues increased in fiscal year 2016 over fiscal year 2015 primarily due to increases in revenues from services, primarily in North America, and software licenses, partially offset by a decrease from hardware products. The Americas Oncology Systems revenues increased in fiscal year 2015 over fiscal year 2014 primarily due to an increase in revenues from services, primarily in North America, and, to a lesser extent, an increase in revenues from services in Latin America. Also contributing to the increase in the Americas Oncology Systems revenues was an increase in revenues from software licenses in North America. These increases were partially offset by a decrease in revenues from hardware products in North America.

EMEA Oncology Systems revenues increased in fiscal year 2016 over fiscal year 2015 primarily due to an increase in revenues from hardware products, and, to a lesser extent, an increase in revenues from services and software licenses. EMEA Oncology Systems revenues were flat in fiscal year 2015 compared to fiscal year 2014 primarily due to an increase in revenues from software licenses being mostly offset by decreases in revenues from services and hardware products.

APAC Oncology Systems revenues increased in fiscal year 2016 over fiscal year 2015 primarily due to an increase in revenues from hardware products, and to a lesser extent, increases in revenues from software licenses and services. APAC Oncology Systems revenues decreased in fiscal year 2015 over fiscal year 2014, primarily due to a decrease in revenues from hardware products revenues, partially offset by an increase revenues from service revenues.

Varying cycles of higher and lower revenues between the North American and international regions are impacted by regional influences, which recently have included government stimulus programs, economic and political instability in some countries, uncertainty created by health care reform (such as the excise tax on the sale of most medical devices, Medicare reimbursement rates and consolidation of free standing clinics in the United States), and different technology adoption cycles that are consistent with the gross order patterns. See further discussion of orders under “Gross Orders.”

Imaging Components Revenues

Revenues by sales classification	Fiscal Years				
(Dollars in millions)	2016	Percent Change	2015	Percent Change	2014
Product	$559.3	(4)%	$583.5	(8)%	$637.1
Service	38.3	38 %	27.7	20 %	23.1
Total Imaging Components Revenues	$597.6	(2)%	$611.2	(7)%	$660.2
Product as a percentage of Imaging Components revenues	94 %		95 %		97 %
Service as a percentage of Imaging Components revenues	6 %		5 %		3 %
Imaging Components revenues as a percentage of total revenues	19 %		20 %		22 %

Imaging Components product revenues decreased in fiscal year 2016 over fiscal year 2015 primarily due to a decrease in revenues from our flat panel and X-ray tube products, partially offset by an increase of $34.6 million from acquisitions completed in the second half of fiscal year 2015. Revenues from our flat panel and tube products decreased primarily due to pricing pressures resulting from a strong U.S. Dollar, customers migrating to lower cost alternatives, and the decision of a customer to in-source some of its flat panel products in the second half of fiscal year 2015. In addition, lower purchases from a customer with higher X-ray tube inventory, due in part to longer tube life, also contributed to the declines in revenues.

Imaging Components product revenues decreased in fiscal year 2015 over fiscal year 2014 primarily due to a decrease in revenues from our security and inspection products and flat panel products, and to a lesser extent, a decrease in revenues from our X-ray tube products, partially offset by $10.8 million in revenues from acquisitions completed in the second half of fiscal year 2015. Revenues from our security and inspection products decreased in fiscal year 2015 over fiscal year 2014 primarily due to pricing pressures and delays in tenders in which our customers participate. Revenues from our flat panel and X-ray tube products decreased primarily due to pricing pressures resulting from the strengthening of the U.S. Dollar, and the decision of a customer to in-source some of their products that they had previously purchased from our flat panel business.

Imaging Components service revenues increased in fiscal year 2016 over fiscal year 2015 primarily due to an increase of $7.7 million in service revenues from one of our acquisitions completed in the second half of fiscal year 2015, and an increase in revenues from our security and inspection products. Imaging Components service revenues increased in fiscal year 2015 over fiscal year 2014, primarily due to $3.8 million in service revenues from one of our acquisitions completed in the second half of fiscal year 2015 and in part due to the extra week of operations in fiscal year 2015.

Because sales transactions in Imaging Components are generally denominated in U.S. Dollars, fluctuations in currency exchange rates did not have a material direct translational impact on Imaging Components international revenues. However, a strong U.S. Dollar against certain foreign currencies has increased pricing pressures and has made our X-ray tube and flat panel products relatively more expensive as compared to competitors' products sold in non-U.S. Dollar currencies.

Revenues by region	Fiscal Years				
(Dollars in millions)	2016	Percent Change	2015	Percent Change	2014
Americas	$202.2	(8)%	$219.3	(5)%	$230.0
EMEA	179.5	15 %	155.9	(17)%	188.1
APAC	215.9	(8)%	236.0	(3)%	242.1
Total Revenues	$597.6	(2)%	$611.2	(7)%	$660.2
North America	$194.0	(8)%	$210.9	(6)%	$223.2
International	403.6	1 %	400.3	(8)%	437.0
Total Revenues	$597.6	(2)%	$611.2	(7)%	$660.2
North America as a percentage of total Imaging Components revenues	33 %		34 %		34 %
International as a percentage of total Imaging Components revenues	67 %		66 %		66 %

The Americas Imaging Components revenues decreased in fiscal year 2016 over fiscal year 2015 due to a decrease in revenues from flat panel products, partially offset by an increase of $19.8 million in revenues from acquisitions completed in the second half of fiscal year 2015. The Americas Imaging Components revenues decreased in fiscal year 2015 over fiscal year 2014 primarily due to decreases in revenues from X-ray tube, flat panel products, and security and inspection products, partially offset by $6.9 million in revenues from acquisitions completed in the second half of fiscal year 2015.

EMEA Imaging Components revenues increased in fiscal year 2016 over fiscal year 2015 due to an increase of $13.7 million in revenues from acquisitions completed in the second half of fiscal year 2015, and to a lesser extent, an increase in revenues from flat panel products. EMEA Imaging Components revenues decreased in fiscal year 2015 over fiscal year 2014 due to a decrease in revenues from security and inspection products, partially offset by $5.6 million in revenues from acquisitions completed in the second half of fiscal year 2015.

APAC Imaging Components revenues decreased in fiscal year 2016 over fiscal year 2015 primarily due to a decrease in revenues from X-ray tube products, and to a lesser extent, a decrease in revenues from flat panel products, partially offset by an increase of $8.8 million in revenues from acquisitions completed in the second half of fiscal year 2015.

APAC Imaging Components revenues decreased in fiscal year 2015 over fiscal year 2014 primarily due to a decrease from flat panel products, and to a lesser extent, a decrease in revenues from security and inspection products, partially offset by $2.1 million in revenues from acquisitions completed in the second half of fiscal year 2015 and an increase in revenues from X-ray tube products.

Other Revenues

Revenues by sales classification	Fiscal Years				
(Dollars in millions)	2016	Percent Change	2015	Percent Change	2014
Product	$153.5	11 %	$137.9	239 %	$40.7
Service	9.6	58 %	6.0	30 %	4.7
Total Other revenues	$163.1	13 %	$143.9	217 %	$45.4
Other revenues as a percentage of total revenues	5 %		4 %		1 %

“Other” category revenues increased in fiscal year 2016 over fiscal year 2015 primarily due to the continued production and installation of VPT projects that are in our backlog. “Other” category revenues increased in fiscal year 2015 over fiscal year 2014 primarily due to the completion of the financing for the MPTC project in fiscal year 2015, which resulted in approximately $81 million of revenue recorded related to that project, and due to the continued production and installation of VPT projects that are in our backlog.

Gross Margin

	Fiscal Years				
Dollars by segment	2016	Percent Change	2015	Percent Change	2014
(Dollars in millions)					
Oncology Systems	$1,087.7	9 %	$998.9	(2)%	$1,021.1
Imaging Components	248.5	(1)%	250.6	(10)%	278.6
Other	25.1	(24)%	33.2	n/m	2.0
Gross margin	$1,361.3	6 %	$1,282.7	(1)%	$1,301.7
Percentage by segment					
Oncology Systems	44.3 %		42.6 %		43.6 %
Imaging Components	41.6 %		41.0 %		42.2 %
Total Company	42.3 %		41.4 %		42.7 %

n/m = not meaningful

Total gross margin percentage increased in fiscal year 2016 over fiscal year 2015 due to increases in gross margin percentage from Oncology Systems and Imaging Components, partially offset by an increase in revenues from the "Other" category which has lower overall margins. Total gross margin percentage decreased in fiscal year 2015 over fiscal year 2014 due to decreases in margins from Imaging Components and Oncology Systems, and an increase in revenues from the "Other" category which has lower overall margins.

Total product gross margin percentage was 34.1% in fiscal year 2016, compared to 33.1% in fiscal year 2015 and 36.9% in fiscal year 2014. Total service gross margin percentage was 58.7% in fiscal year 2016, compared to 58.3% in fiscal year 2015 and 55.1% in fiscal year 2014.

Oncology Systems product gross margin percentage was 34.2% in fiscal year 2016, compared to 31.6% in fiscal year 2015 and 35.6% in fiscal year 2014. The increase in product gross margin percentage in fiscal year 2016 over fiscal year 2015 was primarily due to the suspension of the medical device excise tax in fiscal year 2016, an increase in software license revenue which has a higher gross margin percentage, and the impact of cost reduction programs. The decrease in product gross margin in fiscal year 2015 over fiscal year 2014 was due to an unfavorable foreign currency impact and a shift to geographies which generally have lower margins.

Oncology Systems service gross margin percentage was 58.2% in fiscal year 2016, compared to 57.8% in fiscal year 2015 and 55.5% in fiscal year 2014. The increase in service gross margin percentage in fiscal year 2016 over fiscal year 2015 was primarily due to cost containment and an increase in service revenues. The increase in service gross margin percentage in fiscal year 2015 over fiscal year 2014 was primarily due to cost containment and an increase in service revenues, partially offset by an unfavorable foreign currency impact.

Imaging Components gross margin percentage increased in fiscal year 2016 over fiscal year 2015 primarily due to increases in gross margin percentages from X-ray tube, flat panels, and security and inspection products. The increase in gross margin percentage from X-ray tube products was primarily due to productivity improvements, partially offset by increased quality costs. The increase in gross margin percentage from flat panel products was primarily due to productivity gains and a favorable product mix, partially offset by pricing pressures. The increase in security and inspection products gross margin percentage was primarily due to favorable product mix.

Imaging Components gross margin percentage decreased in fiscal year 2015 over fiscal year 2014 primarily due to decreases in gross margin percentage from X-ray tubes and flat panel products, partially offset by an increase in gross margin percentage from security and inspection products. The decrease in gross margin percentage in our X-ray tube and flat panel products in fiscal year 2015 over fiscal year 2014, was primarily due to increased pricing pressures resulting from the strengthening of the U.S. Dollar and higher material costs in X-ray tube products, partially offset by product and quality cost reductions. The increase in gross margin percentage in security and inspection products was due to a favorable product mix, partially offset by pricing pressures and significantly lower volumes in the second half of fiscal year 2015.

Research and Development

	Fiscal Years				
(Dollars in millions)	2016	Percent Change	2015	Percent Change	2014
Research and development	$253.5	3 %	$245.2	4 %	$234.8
As a percentage of total revenues	8 %		8 %		8 %

Research and development expenses increased $8.3 million in fiscal year 2016 over fiscal year 2015 primarily due to a $5.3 million increase in the "Other" category and a $3.3 million increase in Imaging Components. The increase in the "Other" category was primarily due to an increase in new development projects and employee-related costs in VPT. The increase in Imaging Components was primarily due to an increase of $7.1 million in research and development expenses related to our acquisitions completed in the second half of fiscal year 2015, partially offset by a reduction in spending on current projects.

Research and development expenses increased $10.4 million in fiscal year 2015, over fiscal year 2014 due to increases in expenses of $10.5 million in Imaging Components and $2.4 million in the “Other” category, partially offset by a $2.2 million decrease in expense in Oncology Systems. The increase in expenses in Imaging Components was due to new product development projects and enhancement of existing products and $3.7 million in additional research and development expenses related to our acquisitions in fiscal year 2015. The increase in expenses from the “Other” category was due to an increase in development projects and headcount for our VPT business partially offset by a favorable currency impact when non-U.S. Dollar currency denominated research and development expenses were translated into U.S. Dollars. The decrease in Oncology Systems was primarily due to a favorable currency impact when non-U.S. Dollar currency denominated research and development expenses were translated into U.S. Dollars, which was partially offset by an increase in expense due to new product development projects and enhancement of existing products.

Selling, General and Administrative, Separation Costs, and Litigation Settlement

	Fiscal Years				
(Dollars in millions)	2016	Percent Change	2015	Percent Change	2014
Selling, general and administrative	$540.1	11 %	$488.5	4 %	$470.6
Separation costs	$16.9	— %	$—	— %	$—
Litigation settlement	$—	— %	$—	(100)%	$25.1
Selling, general and administrative as a percentage of total revenues	17 %		16 %		15 %
Separation costs as a percentage of total revenues	1 %		— %		— %
Litigation settlement as a percentage of total revenues	— %		— %		1 %

Selling, general and administrative expenses increased $51.6 million in fiscal year 2016 over fiscal year 2015 primarily due to: a $21.1 million increase in legal expenses primarily relating to legal proceedings, a $19.6 million increase in employee-related costs largely due to an increase in headcount primarily in Oncology Systems and accrued bonuses, a $10.2 million increase in operating expenses from our acquisitions completed in the second half of fiscal year 2015, a $6.6 million increase in international commissions paid to third-party distributors who sell our products, and a $3.8 million increase in trade show expense. These increases were partially offset by a $8.4 million favorable currency impact when foreign-currency denominated expenses were translated into U.S. dollars and a $8.0 million decrease in restructuring charges.

Selling, general and administrative expenses increased $17.9 million in fiscal year 2015 over fiscal year 2014 primarily due to: a $34.5 million increase in employee-related costs (including a $5.2 million increase in share-based compensation expense due to the timing of the equity awards) largely due to an increase in headcount; and a $13.3 million restructuring charge related to retirement and workforce reduction programs. These increases were offset by an approximately $16 million favorable currency impact when non-U.S. Dollar currency denominated sales, general and administrative expenses were translated into U.S. Dollars; a $7.7 million impairment charge of our investment in Augmenix in fiscal year 2014 that did not occur in fiscal year 2015; and a $6.0 million decrease in bad debt expense.

In fiscal year 2016, we recorded $16.9 million in costs relating to the separation of our Imaging Components business. See Note 1, "Summary of Significant Accounting Policies" in our Notes to the Consolidated Financial Statements for additional information.

In fiscal year 2014, we recorded a litigation settlement charge of $25.1 million as a result of settlement of patent litigation with University of Pittsburgh, and no such charges were recorded in fiscal year 2015. See Note 9, "Commitments and Contingencies" in our Notes to the Consolidated Financial Statements for additional information.

Interest Income, Net

	Fiscal Years				
(Dollars in millions)	2016	Percent Change	2015	Percent Change	2014
Interest income, net	$5.6	—%	$5.7	70 %	$3.3

Interest income, net of interest expense was flat in fiscal year 2016 over fiscal year 2015, primarily due to an increase in interest expense associated with increased borrowings from our credit facility being mostly offset by interest income generated from our loans to finance proton treatment centers. Interest income, net of interest expense, increased in fiscal year 2015 over fiscal year 2014, primarily due to higher interest income generated from our loans to finance proton treatment centers, partially offset by a higher interest expense associated with increased borrowings from our credit facility.

Taxes on Earnings

	Fiscal Years				
	2016	Percent Change	2015	Percent Change	2014
Effective tax rate	27.6%	1.9 %	25.7%	(4.0)%	29.7%

Our effective tax rate increased in fiscal year 2016 over fiscal year 2015 primarily due to an unfavorable shift in the geographic mix of earnings, including an increase in the amount of loss from our VPT business in Germany, a jurisdiction for which we have a full valuation allowance. This increase was partially offset by a larger benefit of the federal research and development credit. Because of the timing of the lapses and retroactive reinstatements of the federal research and development credit, we were eligible for seven quarters of benefit in fiscal year 2016 and four quarters of benefit in fiscal year 2015.

Our effective tax rate decreased in fiscal year 2015 from fiscal year 2014 primarily due to a favorable shift in the geographic mix of earnings, including a decrease in the amount of loss from our VPT business in Germany, a jurisdiction for which we have a full valuation allowance, partially offset by the impact of a fluctuation in foreign currency exchange rates. In addition, our effective tax rate in fiscal year 2015 reflected a full year’s benefit of the federal research and development credit, while the effective tax rate in fiscal year 2014 reflected only one quarter’s benefit of the credit.

In general, our effective income tax rate differs from the U.S. federal statutory rate primarily because our foreign earnings are taxed at rates that are, on average, lower than the U.S. federal rate, and our domestic earnings are subject to state income taxes. See Note 14, "Taxes on Earnings" of the Notes to the Consolidated Financial Statements for further information.

Diluted Net Earnings Per Share

	Fiscal Years				
	2016	Percent Change	2015	Percent Change	2014
Diluted net earnings per share	$4.19	2 %	$4.09	7 %	$3.83

Diluted net earnings per share increased in fiscal year 2016 over fiscal year 2015 primarily due to a reduction in the number of diluted shares of common stock outstanding due to share repurchases partially offset by an increase in the effective tax rate. Diluted earnings per share in fiscal year 2016 was negatively impacted by $24.8 million in legal expenses and $16.9 million in costs associated with the separation of our Imaging Components business.

Diluted net earnings per share increased in fiscal year 2015 over fiscal year 2014 primarily due to a reduction in the number of diluted shares of common stock outstanding due to share repurchases and a decrease in the effective tax rate, partially offset by a decrease in earnings before taxes. Diluted net earnings per share in fiscal year 2015 was negatively impacted by a $13.3 million charge relating to our restructuring programs and fiscal year 2014 was negatively impacted by a litigation settlement expense of $25.1 million and an impairment charge of $7.7 million for

our investment in Augmenix.

Gross Orders

Total Gross Orders (by segment)

(Dollars in millions)	Fiscal Years 2016	Percent Change	2015	Percent Change	2014
Oncology Systems	$2,723.6	1 %	$2,696.9	— %	$2,684.4
Imaging Components	571.4	(6)%	605.1	(16)%	722.5
Other	104.7	(67)%	317.2	163 %	120.4
Total Gross Orders	$3,399.7	(6)%	$3,619.2	3 %	$3,527.3

Gross orders are defined as the sum of new orders recorded during the period adjusted for any revisions to existing orders during the period. New orders are recorded for the total contractual amount, excluding certain pass-through items, once a written agreement for the delivery of goods or provision of services is in place and, for businesses other than VPT, when shipment of the product is expected to occur within two years, so long as any contingencies are deemed perfunctory. However, we will not record security and inspection products orders from governmental agencies with bid protest provisions until the expiration of the bid protest period. For our VPT business, we record orders when construction of the related proton therapy treatment center is reasonably expected to start within two years, but only if any contingencies are either deemed perfunctory or if the existence and nature of material contingencies is disclosed. However, we will not record VPT orders if there are major financing contingencies, if a substantial portion of the financing for the project is not reasonably assured or if customer board approval contingencies are pending. We perform a quarterly review to verify that outstanding orders remain valid.

Gross orders in any period may not be directly correlated to the level of revenues in any particular future quarter or period since the timing of revenue recognition will vary significantly based on the delivery requirements of individual orders, acceptance schedules and the readiness of individual customer sites for installation of our products. Moreover, certain types of orders, such as orders for software or newly introduced products in our Oncology Systems segment, typically take more time from order to completion of installation and acceptance than hardware or older products. Gross orders and revenues for our security and inspection products in our Imaging Components segment have been and may continue to be unpredictable as governmental agencies may place large orders with us or with our OEM customers over a short period of time and then may not place any orders for a long time period thereafter. Because an order for a proton therapy system can be relatively large, an order in one fiscal period will cause gross orders in our VPT business to vary significantly, making comparisons between fiscal periods more difficult. Furthermore, bid awards, primarily in our VPT business, may be subject to challenge by third parties, which can make these orders more unpredictable than other products.

Oncology Systems Gross Orders

Gross Orders by region

(Dollars in millions)	Fiscal Years 2016	Percent Change	Constant Currency	2015	Percent Change	Constant Currency	2014
Americas	$1,437.5	4 %	4 %	$1,381.3	1 %	1 %	$1,369.3
EMEA	772.9	(6)%	(4)%	826.0	—%	12 %	826.2
APAC	513.2	5 %	3 %	489.6	—%	9 %	488.9
Total Oncology Systems Gross Orders	$2,723.6	1 %	2 %	$2,696.9	—%	6 %	$2,684.4
North America	$1,312.9	5 %	5 %	$1,255.4	3 %	4 %	$1,214.4
International	1,410.7	(2)%	(1)%	1,441.5	(2)%	8 %	1,470.0
Total Oncology Systems Gross Orders	$2,723.6	1 %	2 %	$2,696.9	—%	6 %	$2,684.4

The Americas Oncology Systems gross orders increased in fiscal year 2016 over fiscal year 2015 primarily due to an increase in gross orders from hardware products in North America, and to a lesser extent an increase in gross orders from services in North America, primarily offset by a decrease in gross orders from software licenses in North America. The Americas Oncology Systems gross orders increased in fiscal year 2015 over fiscal year 2014 primarily

due to an increase in gross orders from services and hardware products in North America, primarily offset by a decrease in gross orders from hardware products in Latin America and software licenses in North America.

EMEA Oncology Systems gross orders decreased in fiscal year 2016 over fiscal year 2015 primarily due to a decrease in gross orders from hardware products, and to a lesser extent decreases in gross orders from software licenses and services. EMEA Oncology Systems gross orders were flat in fiscal year 2015 over fiscal year 2014 primarily due to an increase in gross orders from services, offset by a decrease in gross orders from hardware products.

APAC Oncology Systems gross orders increased in fiscal year 2016 over fiscal year 2015 primarily due to increases in gross orders from services and hardware products. APAC Oncology Systems gross orders were flat in fiscal year 2015 over fiscal year 2014 due to increases in gross orders from services and software licenses, mostly offset by a decrease in gross orders from hardware products.
The extra week of operations in fiscal year 2015 approximately contributed an additional $7 million in Oncology Systems service gross orders in fiscal year 2015.

The trailing 12 month percentage change in gross orders for Oncology Systems at September 30, 2016, and for the three immediately prior fiscal quarters were:

	September 30, 2016	July 1, 2016	April 1, 2016	January 1, 2016
Americas	4%	1%	—%	2%
EMEA	(6)%	4%	4%	(5)%
APAC	5%	1%	(1)%	(5)%
North America	5%	7%	3%	4%
International	(2)%	(2)%	(1)%	(7)%
Total Oncology Systems Gross Orders	1%	2%	1%	(2)%

Consistent with the historical pattern, we expect that Oncology Systems gross orders will continue to experience regional fluctuations. In recent years the percentage of domestic gross orders has increased but we expect in the long-term international gross orders, specifically emerging markets, will grow as a percentage of overall orders. Oncology Systems gross orders are affected by foreign currency fluctuations. In addition, the availability of government programs that stimulate the purchase of healthcare products could affect the demand for our products from period to period, and could therefore make it difficult to compare our financial results.
Imaging Components Gross Orders

Gross Orders by region	Fiscal Years				
(Dollars in millions)	2016	Percent Change	2015	Percent Change	2014
Americas	$176.8	(14)%	$204.9	(8)%	$222.1
EMEA	189.0	29 %	146.2	(35)%	223.6
APAC	205.6	(19)%	254.0	(8)%	276.8
Total Imaging Components Systems Gross Orders	$571.4	(6)%	$605.1	(16)%	$722.5
North America	$170.2	(13)%	$195.8	(9)%	$216.2
International	401.2	(2)%	409.3	(19)%	506.3
Total Imaging Components Systems Gross Orders	$571.4	(6)%	$605.1	(16)%	$722.5

The Americas Imaging Components gross orders decreased in fiscal year 2016 over fiscal year 2015 primarily due to a decrease in gross orders from flat panel products, partially offset by an increase in gross orders from our acquisitions completed in the second half fiscal year 2015. The decrease in gross orders from flat panel products in fiscal year 2016 was primarily due to pricing pressures resulting from a strong U.S. Dollar and a decision of a customer to in-source some of their flat panel products in the second half of fiscal year 2015. The Americas Imaging Components gross orders decreased in fiscal year 2015 over fiscal

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year 2014 primarily due to a decrease in gross orders from flat panel products, and to a lesser extent, a decrease in gross orders from X-ray tube products, partially offset by an increase in gross orders from security and inspection products.

EMEA Imaging Components gross orders increased in fiscal year 2016 over fiscal year 2015 primarily due to an increase in gross orders from our acquisitions completed in the second half of fiscal year 2015, and to a lesser extent, increases in gross orders from security and inspection products, X-ray tube products and flat panel products. EMEA Imaging Components gross orders decreased in fiscal year 2015 over fiscal year 2014, primarily due to a decrease in gross orders from security and inspection products, and to a lesser extent a decrease in gross orders from X-ray tube products.

APAC Imaging Components gross orders decreased in fiscal year 2016 over fiscal year 2015 primarily due to a decrease in gross orders from flat panel products, partially offset by an increase in gross orders from our acquisitions completed in the second half fiscal year 2015. The decrease in flat panel gross orders in the fiscal year 2016 was primarily due to pricing pressures resulting from a strong U.S. Dollar and the timing of several large orders in flat panel products in the prior comparable period. APAC Imaging Components gross orders decreased in fiscal year 2015 over fiscal year 2014 primarily due to a decrease in gross orders from X-ray tube products, and to a lesser extent, a decrease in gross orders from security and inspection products.

Because gross order transactions in Imaging Components are generally denominated in U.S. Dollars, fluctuations in currency exchange rates did not have a material direct translational impact on Imaging Components international gross orders. However, a strong U.S. Dollar against certain foreign currencies has increased pricing pressures and has made our X-ray tube and flat panel products relatively more expensive as compared to competitors' products sold in non-U.S. Dollar currencies.

Other Gross Orders

The “Other” category gross orders decreased in fiscal year 2016 over fiscal year 2015 primarily due to VPT recording two proton therapy product gross orders in fiscal year 2016 compared to six proton therapy gross orders in fiscal year 2015. The “Other” category gross orders increased in fiscal year 2015 over fiscal year 2014 primarily due to VPT recording six proton therapy product gross orders in fiscal year 2015, compared to three proton therapy product gross orders in fiscal year 2014.

Backlog

Backlog is the accumulation of all gross orders for which revenues have not been recognized and are still considered valid. Backlog also includes a small portion of billed service contracts that are included in deferred revenue. Backlog is stated at historical foreign currency exchange rates and revenue is released from backlog at current exchange rates, with any difference recorded as a backlog adjustment. Backlog at September 30, 2016 was $3.5 billion, including approximately $272 million in VPT backlog, which was a decrease of 1% over the backlog at October 2, 2015. Our Oncology Systems backlog at September 30, 2016 was 3% higher than the backlog at October 2, 2015, which reflected a 7% increase for North America and no change for our international region.

We perform a quarterly review to verify that outstanding orders in the backlog remain valid. Aged orders that are not expected to be converted to revenues are deemed dormant and are reflected as a reduction in the backlog amounts in the period identified. Backlog adjustments are comprised of dormancies, cancellations, foreign currency exchange rate adjustments, backlog acquired from our acquisitions, and other adjustments. In fiscal years 2016, 2015 and 2014, our backlog adjustments were a reduction of $203.8 million, $214.9 million and $176.3 million, respectively.

Liquidity and Capital Resources

Liquidity is the measurement of our ability to meet potential cash requirements, including ongoing commitments to repay borrowings, acquire businesses or make other investments or loans, repurchase shares of VMS common stock, and fund continuing operations and capital expenditures. Our sources of cash have included operations, borrowings, stock option exercises and employee stock purchases. Our cash usage is actively managed on a daily basis to ensure the maintenance of sufficient funds to meet our needs.

Cash and Cash Equivalents

The following table summarizes our cash and cash equivalents:

(In millions)	September 30, 2016	October 2, 2015	Increase (Decrease)
Cash and cash equivalents	$ 843.5	$ 845.5	$ (2.0)

The decrease in cash and cash equivalents in fiscal year 2016 compared to fiscal year 2015 was due to $461.3 million of cash used for the repurchase of shares of VMS common stock, $80.4 million used for purchases of property, plant and equipment, $21.7 million used for the issuance of notes receivable, and $21.1 million used for asset and business acquisitions, net of cash acquired. These decreases were mostly offset by $356.3 million in cash provided by operating activities, $167.1 million in net borrowings under our credit facility agreements, and $60.6 million of cash provided by stock option exercises and employee stock purchases.

At September 30, 2016, we had approximately $43.0 million, or 5%, of cash and cash equivalents in the United States. Approximately $800.5 million, or 95%, of cash and cash equivalents was held abroad and a portion of this amount could be subject to additional taxation if it were repatriated to the United States. As of September 30, 2016, most of our cash and cash equivalents that were held abroad were in U.S. Dollars and were primarily held as bank deposits. In addition to cash flows generated from operations, a significant portion of which are generated in the United States, we have used our credit facilities to meet our cash needs from time to time and expect to continue to do so in the future. Borrowings under our credit facilities may be used for working capital, capital expenditures, VMS share repurchases, acquisitions, and other corporate purposes.

Cash Flows

	Fiscal Years		
(In millions)	2016	2015	2014
Net cash flow provided by (used in):			
Operating activities	$356.3	$469.6	$449.0
Investing activities	(109.2)	(210.9)	(133.1)
Financing activities	(245.8)	(276.7)	(595.5)
Effects of exchange rate changes on cash and cash equivalents	(3.3)	14.2	11.0
Net decrease in cash and cash equivalents	$(2.0)	$(3.8)	$(268.6)

Our primary cash inflows and outflows for fiscal years 2016, 2015, and 2014, were as follows:

- We generated net cash from operating activities of $356.3 million in fiscal year 2016, compared to $469.6 million in fiscal year 2015. The $113.3 million decrease in net cash from operating activities during fiscal year 2016 compared to fiscal year 2015 was driven primarily by a decrease of $92.4 million in the net change from operating assets and liabilities (working capital items), a decrease of $11.6 million in non-cash items, and a decrease of $9.3 million in net earnings.

The major contributors to the net change in operating assets and liabilities in fiscal year 2016 were as follows:

- Accounts receivable increased $168.3 million primarily due to higher revenues and timing of collections in Oncology Systems and an increase in unbilled receivables in VPT.
- Inventories increased $27.7 million mainly due to increases in inventories in Imaging Components and VPT in anticipation of future demand, partially offset by a decrease in inventories in Oncology Systems due to increased sales activity.
- Accrued liabilities and other long-term liabilities increased $61.0 million primarily due to timing of payments processed for employee compensation, an increase in our long-term pension liability and timing of income tax payments.
- Deferred revenues decreased $40.2 million primarily due to timing of revenue recognition in Oncology Systems and timing of customer payments in VPT.

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The $20.6 million increase in net cash from operating activities during fiscal year 2015 compared to fiscal year 2014 was driven primarily by an increase of $23.1 million in net change from operating assets and liabilities (working capital items) and an increase of $8.3 million in net earnings, partially offset by a decrease of $10.8 million in non-cash items.

The major contributors to the net change in operating assets and liabilities in fiscal year 2015 were as follows:

- Accounts receivable increased $79.4 million primarily due to longer payment cycles and higher revenues in VPT.
- Inventories increased $41.6 million due to an increase in inventories in Imaging Components and Oncology Systems in anticipation of future demand, partially offset by a decrease in inventories in VPT as a result of the recognition of revenue relating to MPTC.
- Deferred revenues increased $71.6 million due to receipts of down payments for orders for which revenues have not been recognized and due to the nature of contracts and timing of customer acceptances primarily in Oncology Systems.

We expect that cash provided by operating activities may fluctuate in future periods as a result of a number of factors, including fluctuations in our operating results, timing of product shipments, product installation or customer acceptance, collection of accounts receivable, inventory management, and the timing and amount of tax and other payments. See Item 1A, “Risk Factors.”

- Investing activities used $109.2 million of net cash in fiscal year 2016, compared to $210.9 million of net cash used in fiscal year 2015 and $133.1 million of net cash used in fiscal year 2014. Cash used for purchases of property, plant and equipment were $80.4 million in fiscal year 2016, $91.4 million in fiscal year 2015 and $89.6 million in fiscal year 2014, representing our continued investment to expand our infrastructure. During fiscal year 2016, we also used $21.7 million for the issuance of notes receivable and $21.1 million of net cash primarily for asset and business acquisitions, net of cash acquired. During fiscal year 2015, we also used $95.3 million of net cash for acquisitions of businesses, and $23.7 million for issuance of notes receivable. During fiscal year 2014, we used $45.2 million to fund a portion of our loan commitment to CPTC, $31.5 million for acquisitions of businesses and $5.5 million for issuance of notes receivable, partially offset by $38.1 million received from the sale of a portion of our loan to CPTC.
- Financing activities used $245.8 million of net cash in fiscal year 2016, compared to $276.7 million of net cash used in fiscal year 2015 and $595.5 million of net cash provided in fiscal year 2014. In fiscal year 2016, we used $461.3 million of net cash for the repurchase of VMS common stock compared to $422.0 million in fiscal year 2015 and $627.7 million in fiscal year 2014. Cash provided by financing activities included cash proceeds from employee stock option exercises and employee stock purchases of $60.6 million, $91.0 million and $99.7 million in fiscal years 2016, 2015 and 2014, respectively. We had $167.1 million in net borrowings under our credit facility agreements in fiscal year 2016 compared to $58.6 million in fiscal year 2015. In fiscal year 2014, we repaid $68.8 million of our credit facility agreement and other bank borrowings.

In connection with our planned separation of Varex, we are reviewing our capital allocation strategies, some of which could have a significant impact on our liquidity but which, if there were a negative liquidity impact, is not expected to exceed a cash transfer of approximately $75 million from Varian to Varex.

We expect our capital expenditures, which typically represent construction and/or purchases of facilities, manufacturing equipment, office equipment and furniture and fixtures, as well as capitalized costs related to the implementation of software applications, will be approximately 3% of revenues in fiscal year 2017.

On August 27, 2013, VMS entered into an agreement, as amended to date, ("Credit Agreement") with certain lenders and Bank of America, N.A. (“BofA”) as administrative agent ("Debt Lenders"). The Credit Agreement provides for (i) a five-year term loan facility in an aggregate principal amount of up to $500 million (the “2013 Term Loan Facility”) and (ii) a five-year revolving credit facility in an aggregate principal amount of up to $500 million (the “2013 Revolving Credit Facility” and, collectively with the 2013 Term Loan Facility, the “2013 Credit Facility”). The 2013 Revolving

Credit Facility also includes a $50 million sub-facility for the issuance of letters of credit and permits swing line loans of up to $25 million. The aggregate commitments under the 2013 Term Loan Facility may be increased by up to $100 million, and the aggregate commitments under the 2013 Revolving Credit Facility, may be increased by up to $100 million, In September 2016, VMS amended its Credit Agreement to obtain the Debt Lenders' consent to the separation of its Imaging Components business, waive any potential default that may arise as a result of the separation, and increase the maximum consolidated leverage ratio that we must maintain. The Credit Agreement will expire in August 2018. The Credit Agreement contains provisions that limit our ability to,

among other things, incur future indebtedness, contingent obligations or liens, guarantee indebtedness, make certain investments and capital expenditures, sell stock or assets and pay dividends, and consummate certain mergers or acquisitions. The proceeds of the 2013 Credit Facility may be used for working capital, capital expenditures, VMS share repurchases, acquisitions and other corporate purposes. We may prepay, reduce or terminate the commitments without penalty.

In addition, our Japanese subsidiary ("VMS KK") has an unsecured uncommitted credit agreement with Sumitomo Mitsui Banking Corporation that enables VMS KK to borrow and have outstanding at any given time a maximum of 3 billion Japanese Yen (the "Sumitomo Credit Facility"). In February 2016, the Sumitomo Credit Facility was extended and will expire in February 2017.

The following table summarizes our short-term and long-term debt:

	September 30, 2016		October 2, 2015	
(In millions except for percentages)	Amount	Weighted-Average Interest Rate	Amount	Weighted-Average Interest Rate
Current portion of 2013 Term Loan Facility	$50.0	1.65 %	$50.0	1.32 %
2013 Revolving Credit Facility	300.0	1.91 %	90.0	1.57 %
Sumitomo Credit Facility	29.6	0.53 %	18.4	0.63 %
Total short-term debt	$379.6		$158.4	
2013 Term Loan Facility	$287.5	1.65 %	$337.5	1.32 %
Total long-term debt	$287.5		$337.5	

See Note 7, "Borrowings" of the Notes to the Consolidated Financial Statements for a detailed discussion regarding the 2013 Credit Facility and the Sumitomo Credit Facility.

The following table provides additional information regarding our short-term borrowings (excluding current maturities of long-term debt):

	Fourth Quarter of Fiscal Year	Fiscal Years		
(In millions except for percentages)	2016	2016	2015	2014
Amount outstanding (at end of period)	$329.6	$329.6	$108.4	$—
Weighted average interest rate (at end of period)	1.78 %	1.78 %	1.41 %	— %
Average amount outstanding (during period)	$366.3	$320.8	$104.5	$8.2
Weighted average interest rate (during period)	1.79 %	1.68 %	1.48 %	0.72 %
Maximum month-end amount outstanding during period	$406.5	$431.6	$140.0	$29.6

Our liquidity is affected by many factors, some of which result from the normal ongoing operations of our business and some of which arise from uncertainties and conditions in the United States and global economies. Although our cash requirements will fluctuate as a result of the shifting influences of these factors, we believe that existing cash and cash equivalents and cash to be generated from operations and current or future credit facilities will be sufficient to satisfy anticipated commitments for capital expenditures and other cash requirements for the next 12 months and into the foreseeable future. We currently anticipate that we will continue to utilize our available liquidity and cash flows from operations, as well as borrowed funds, to make strategic acquisitions, invest in the growth of our business, invest in advancing our systems and processes, repurchase VMS common stock and fund our loan commitments and other strategic investments.

Total debt as a percentage of total capital increased to 27.7% at September 30, 2016 from 22.3% at October 2, 2015 primarily due to increased borrowings under our 2013 Credit Facility. The ratio of current assets to current liabilities decreased to 1.62 to 1 at September 30, 2016 from 1.74 to 1 at October 2, 2015.

Days Sales Outstanding

Trade accounts receivable days sales outstanding ("DSO") was 93 days at September 30, 2016 compared to 90 days at October 2, 2015. Excluding VPT, DSO was 85 days at September 30, 2016 compared to 82 days at October 2, 2015.

Our

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accounts receivable and DSO are impacted by a number of factors, primarily including the timing of product shipments, product installation or customer acceptance, collections performance, payment terms, the mix of revenues from different regions and the effects of continued economic instability. As of September 30, 2016, approximately 6% of our accounts receivable balance was related to customer contracts with remaining terms of more than one year.

Share Repurchase Program

We repurchased shares of VMS common stock under various authorizations during the periods presented as follows:

	Fiscal Years		
(In millions, except per share amounts)	2016	2015	2014
Number of shares	5.7	4.8	7.8
Average repurchase price per share	$81.61	$87.47	$80.52
Total cost	$461.3	$422.0	$624.0

The repurchased shares include shares of VMS common stock repurchased under various accelerated share repurchase agreements. All shares that were repurchased have been retired.

In November 2015, the VMS Board of Directors authorized the repurchase of 8.0 million shares of VMS common stock through December 31, 2016. As of September 30, 2016, approximately 3.8 million shares of VMS common stock remained available for repurchase under the November 2015 authorization. In November 2016, the VMS Board of Directors authorized the repurchase of additional 8.0 million shares of VMS common stock commencing on January 1, 2017.

For more details see Note 11, "Stockholders' Equity and Noncontrolling Interests" of the Notes to the Consolidated Financial Statements for further discussion.

Contractual Obligations

The following summarizes our contractual obligations as of September 30, 2016 and the effect such obligations are expected to have on our liquidity and cash flows in future periods:

	Payments Due By Period				
(In millions)	Fiscal Year 2017	Fiscal Years 2018-2019	Fiscal Years 2020-2021	Beyond	Total
Long-term debt [1] (including current maturities)	$ 50.0	$ 287.5	$ —	$ —	$ 337.5
Interest obligation on long-term debt (including current maturities) [2]	5.3	4.0	—	—	9.3
Operating leases [3]	27.5	36.1	23.3	19.4	106.3
Purchase obligations [4]	27.9	35.2	13.8	—	76.9
Defined benefit pension plans [5]	7.2	—	—	—	7.2
Total [6]	$ 117.9	$ 362.8	$ 37.1	$ 19.4	$ 537.2

(1) For further discussion regarding long-term debt, see Note 7, "Borrowings" of the Notes to the Consolidated Financial Statements.

(2) Interest on long-term debt has been calculated based on the interest rate applicable as of September 30, 2016.

(3) Operating leases include future minimum lease payments under all our non-cancellable operating leases as of September 30, 2016.

(4) Purchase obligations include agreements to purchase goods or services that are enforceable, are legally binding and non-cancellable. Purchase obligations do not include agreements that are cancellable without penalty.

(5) As further described in Note 10, "Retirement Plans" of the Notes to the Consolidated Financial Statements, our post-retirement benefit plan is not presented in the table above as it is not material. As of September 30, 2016, the remaining defined benefit pension plans were underfunded by $40.2 million. Due to the impact of future plan asset performance, changes in interest rates and other economic and demographic assumptions, the potential for changes in legislation in

the United States and other foreign jurisdictions, we are not able to reasonably estimate the timing and amount of contributions necessary to fund our defined benefit pension plans beyond the next fiscal year.

(6) The following items are not included in the table above:

- Long-term income taxes payable includes the liability for uncertain tax positions, including interest and penalties, and may also include other long-term tax liabilities. As of September 30, 2016, our total liability for uncertain tax positions was $46.2 million, of which we do not anticipate a payment in the next 12 months. We are unable to reliably estimate the timing of the remainder of future payments related to uncertain tax positions. See a detailed discussion in Note 14, "Taxes on Earnings" of the Notes to the Consolidated Financial Statements.
- As further described in Note 9, “Commitments and Contingencies,” of the Notes to the Consolidated Financial Statements, as of September 30, 2016, we had accrued $8.1 million for environmental remediation liabilities. The amount accrued represents estimates of anticipated future costs and the timing and amount of actual future environmental remediation costs may vary as the scope of our obligations becomes more clearly defined.
- As further described in Note 16, "VPT Loans,” of the Notes to the Consolidated Financial Statements, as of September 30, 3016, our outstanding commitment under the loan to MPTC was $11.4 million, which was paid in October 2016. As of September 30, 2016, our outstanding commitment under the loans to CPTC was $1.1 million and is expected to be drawn down over the next 12 months.
- As further described in Note 6, “Related Party Transactions” of the Notes to the Consolidated Financial Statements, as of September 30, 2016, we had an estimated fixed cost commitment of $4.5 million related to dpiX's amended agreement through December 31, 2016. The fixed cost commitment for future periods will be determined and approved by the dpiX board of directors at the beginning of each calendar year.
- As further described in Note 11, "Stockholders' Equity and Noncontrolling Interests" of the Notes to the Consolidated Financial Statements, in October 2015, we committed to grant the noncontrolling shareholders of MeVis: (1) an annual recurring net compensation of €0.95 per MeVis share and (2) a put right for their MeVis shares at €19.77 per MeVis share. As of September 30, 2016, noncontrolling shareholders together held approximately 0.5 million shares of MeVis, representing 26.4% of the outstanding shares.
- In connection with the acquisitions of businesses in prior years, we entered into agreements which include provisions to make additional consideration payments upon the achievement of certain milestones by the acquired businesses. As of September 30, 2016, the accrual for potential contingent consideration under these agreements was $1.3 million.

Contingencies

Environmental Remediation Liabilities

For a discussion of environmental remediation liabilities, see Note 9, “Commitments and Contingencies — Environmental Remediation Liabilities” of the Notes to the Consolidated Financial Statements, which discussion is incorporated herein by reference.

Other Matters

From time to time, we are a party to or otherwise involved in legal proceedings, claims and government inspections or investigations and other legal matters both inside and outside the United States, arising in the ordinary course of our business or otherwise. Such matters are subject to many uncertainties and outcomes are not predictable with assurance. See Note 9, “Commitments and Contingencies — Other Matters” of the Notes to the Consolidated Financial Statements, which discussion is incorporated herein by reference.

Off-Balance Sheet Arrangements

In conjunction with the sale of our products in the ordinary course of business, we provide standard indemnification of business partners and customers for losses suffered or incurred for property damages, death and injury and for patent, copyright or any other intellectual property infringement claims by any third parties with respect to our products. The terms of these indemnification arrangements are generally perpetual. Except for losses related to property damages, the maximum potential amount of future payments we could be required to make under these arrangements is unlimited. As of September 30, 2016, we have not incurred any significant costs since the Spin-offs to defend lawsuits or settle claims related to these indemnification arrangements. As a result, we believe the estimated fair value of these arrangements is minimal.

We have entered into indemnification agreements with our directors and officers and certain of our employees that serve as officers or directors of our foreign subsidiaries that may require us to indemnify our directors and officers and those certain employees against liabilities that may arise by reason of their status or service as directors or officers, and to advance their expenses incurred as a result of any legal proceeding against them as to which they could be indemnified.

Accounting Pronouncement Recently Adopted

In November 2015, the Financial Accounting Standards Board ("FASB") issued an amendment to its accounting guidance related to balance sheet classification of deferred taxes. The amendment requires that deferred tax assets and liabilities be classified as noncurrent in the Consolidated Balance Sheets. The amendment is effective for all annual periods, and interim periods within those annual periods, beginning after December 15, 2016, with early adoption permitted. We adopted this amendment in the third quarter of fiscal year 2016, on a retrospective basis. To conform to the current year presentation, we decreased current deferred tax assets by $132.1 million and current deferred tax liabilities, which was included in accrued liabilities, by $6.3 million and increased long-term deferred tax assets by $110.0 million and decreased deferred tax liabilities, which was included in other long-term liabilities, by $15.8 million, on our Consolidated Balance Sheet as of October 2, 2015. The adoption of this amendment had no impact to our Consolidated Statements of Earnings or Statements of Cash Flows.

Recent Accounting Standards or Updates Not Yet Effective

In November 2016, the FASB amended its guidance on the classification and presentation of restricted cash in the statement of cash flow. The amendment requires entities to include restricted cash and restricted cash equivalents in its cash and cash equivalents in the statement of cash flow. The amendment will be effective for us beginning in our first quarter of fiscal year 2019 with early adoption permitted. The amendment is required to be adopted retrospectively. We are evaluating the impact of adopting this amendment to our consolidated financial statements.

In October 2016, the FASB amended its guidance for tax accounting for intra-entity asset transfers. The amendment removes the prohibition against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. The amendment will be effective for us beginning in our first quarter of fiscal year 2019. Early adoption is permitted. The amendment is required to be adopted on a modified retrospective basis. We are evaluating the impact of adopting this amendment to our consolidated financial statements.

In August 2016, the FASB issued an amendment to its accounting guidance related to the classification of certain cash receipts and cash payments. The amendment was issued to reduce the diversity in practice in how certain transactions are classified in the statement of cash flows. The amendment will be effective for us beginning in our first quarter of fiscal year 2019 with early adoption permitted. The amendment is required to be adopted retrospectively unless it is impracticable. We are evaluating the impact of adopting this amendment to our consolidated financial statements.

In June 2016, the FASB issued an amendment to its accounting guidance related to impairment of financial instruments. The amendment adds a new impairment model that is based on expected losses rather than incurred losses. The amendment will be effective for us beginning in our first quarter of fiscal year 2021 with early adoption permitted beginning in the first quarter of fiscal year 2020. We are evaluating the impact of adopting this amendment to our consolidated financial statements.

In March 2016, the FASB issued an amendment to its accounting guidance related to employee share-based payments. The amendment simplifies several aspects of the accounting for employee share-based payments including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. The amendment will be effective for us beginning in our first quarter of fiscal year 2018 with

early adoption permitted. We are evaluating the impact of adopting this amendment to our consolidated financial statements.

In February 2016, the FASB issued a new standard on accounting for leases. The new standard is intended to provide enhanced transparency and comparability by requiring lessees to record right-of-use assets and corresponding lease liabilities on the balance sheet. The new standard will continue to classify leases as either finance or operating, with classification affecting the

pattern of expense recognition in the statement of earnings. The new standard is required to be adopted using a modified retrospective method to each prior reporting period presented with various optional practical expedients. The new standard will be effective for us beginning in our first quarter of fiscal year 2020 with early adoption permitted. We are evaluating the impact of adopting this amendment to our consolidated financial statements.

In January 2016, the FASB issued an amendment to its accounting guidance related to recognition and measurement of financial assets and financial liabilities. The amendment addresses certain aspects of recognition, measurement, presentation and disclosure of financial instruments. The amendment will be effective for us beginning in our first quarter of fiscal year 2019. We are evaluating the impact of adopting this amendment to our consolidated financial statements.

In September 2015, the FASB issued a new accounting standard that eliminates the requirement to restate prior period financial statements for measurement period adjustments following a business combination. The new standard became effective for us beginning in our first quarter of fiscal year 2017. The new standard is not expected to have a material impact to our consolidated financial statements.

In July 2015, the FASB issued an amendment to its accounting guidance related to inventory measurement. The amendment requires inventory measured using first-in, first-out (FIFO) or average cost to be subsequently measured at the lower of cost and net realizable value, thereby simplifying the current guidance that requires an entity to measure inventory at the lower of cost or market. The amendment will be effective for us beginning in our first quarter of fiscal year 2018. The amendment is not expected to have a material impact to our consolidated financial statements.

In April 2015, the FASB issued an amendment to its accounting guidance related to internal use software. The amendment clarifies that the software license element of a cloud computing arrangements should be accounted for consistent with the acquisition of other software licenses. The amendment became effective for us beginning in our first quarter of fiscal year 2017. The amendment is not expected to have a material impact to our consolidated financial statements.

In April 2015, the FASB issued an amendment to its accounting guidance related to retirement benefits. The amendment provides a practical expedient that permits an entity with a fiscal year-end that does not coincide with a month-end to measure defined benefit plan assets and obligations using the month-end that is closest to the entity’s fiscal year-end. The amendment also provides a practical expedient that permits an entity that has a significant event in an interim period to remeasure defined benefit plan assets and obligations using the month-end that is closest to the date of the significant event. The amendment became effective for us beginning in our first quarter of fiscal year 2017. The amendment is not expected to have a material impact to our consolidated financial statements.

In March 2015, the FASB issued an amendment to its accounting guidance related to presentation of debt issuance costs. The amendment requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability. The amendment will be effective for us beginning in the first quarter of fiscal year 2017. In August 2015, the FASB further clarified that entities are permitted to defer and present debt issuance costs related to line-of-credit arrangements as assets. These amendments are not expected to have a material impact to our consolidated financial statements.

In February 2015, the FASB issued an amendment to its accounting guidance related to consolidation. The amendment modifies the analysis that a reporting entity must perform to determine whether it should consolidate certain types of legal entities. The amendment became effective for us beginning in our first quarter of fiscal year 2017. The amendment is not expected to have a material impact to our consolidated financial statements.

In June 2014, the FASB issued an amendment to its accounting guidance related to stock-based compensation. The amendment requires that a performance target that could be achieved after the requisite service period be treated as a performance condition that affects vesting, rather than a condition that affects the grant-date fair value. The amendment became effective for us beginning in our first quarter of fiscal year 2017. The amendment is not expected to have a material impact to our consolidated financial statements.

In May 2014, the FASB issued a new revenue standard, which sets forth a single, comprehensive revenue recognition model for all contracts with customers to improve comparability. The new standard requires revenue recognition to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity

expects to be entitled in exchange for those goods or services. In March 2016, the FASB amended the principal-versus-agent implementation guidance and illustrations in the new standard. In April 2016, the FASB amended the guidance on identifying performance obligations and the implementation guidance on licensing in the new standard. In May 2016, the FASB amended the guidance on collectability, noncash consideration, presentation of sales tax and transition in the new standard. The new standard will be

effective for us beginning in our first quarter of fiscal year 2019, with early adoption permitted, but not before the first quarter of fiscal year 2018. The new standard can be applied either retrospectively to each prior reporting period presented (i.e., full retrospective adoption) or with the cumulative effect of initially applying the update recognized at the date of the initial application (i.e., modified retrospective adoption) along with additional disclosures. We currently anticipate adopting this standard using the full retrospective method to restate each prior period presented. We are evaluating the timing and the impact of adopting this standard to our consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risks

We are exposed to three primary types of market risks: credit risk and counterparty risk, foreign currency exchange rate risk and interest rate risk.

Credit Risk and Counterparty Risk

We are exposed to credit loss in the event of nonperformance by counterparties on the foreign currency forward contracts used in hedging activities. These counterparties are large international and regional financial institutions and to date, no such counterparty has failed to meet its financial obligation to us under such contracts.

We are also exposed to credit loss in the event of default by counterparties of our financing receivables and CPTC, the obligor under the loan facility in which we are participating to finance the construction and start-up operations of the Scripps Proton Therapy Center. In November 2015, ORIX, J.P. Morgan and the Company (collectively the “Lenders”) and CPTC entered into a forbearance agreement whereby the lenders will not enforce their rights to principal and interest payments until April 2017, subject to CPTC maintaining certain covenants and achieving certain targets, with additional extensions through September 2017 based on hitting additional targets largely around patient volume and cash flow. In connection with the forbearance agreement the Lenders agreed to make available up to an additional $9.7 million of loan proceeds (based on their pro-rata share of the existing loan) with terms similar to the Tranche A loan for additional working capital needs; our proportionate share of this commitment is $4.4 million. There were no other significant changes to the loan agreements. As of September 30, 2016, our outstanding commitment under the CPTC loans was $1.1 million and is expected to be drawn down over the next 12 months. As of September 30, 2016, even though patient volumes continued to increase, CPTC was not in compliance with one of the patient volume covenants in the forbearance agreement, which would allow the Lenders to cease funding under the Tranche C loan and terminate the forbearance agreement.

Financing receivables include notes receivable from NYPC and MPTC of $18.5 million and $40.7 million, respectively.

In addition, cash and cash equivalents held with financial institutions may exceed the Federal Deposit Insurance Corporation insurance limits or similar limits in foreign jurisdictions. We also may need to rely on our credit facilities as described below under “Interest Rate Risk.” Our access to our cash and cash equivalents or ability to borrow could be reduced if one or more financial institutions with which we have deposits or from which we borrow should fail or otherwise be adversely impacted by conditions in the financial or credit markets. Conditions such as those we experienced as a result of the last economic downturn and accompanying contraction in the credit markets heighten these risks. Concerns over continued economic instability could make it more difficult for us to collect outstanding receivables and could adversely impact our liquidity.

Foreign Currency Exchange Rate Risk

As a global entity, we are exposed to movements in foreign currency exchange rates. These exposures may change over time as business practices evolve. Adverse foreign currency rate movements could have a material negative impact on our financial results. Our primary exposures related to foreign currency denominated sales and purchases are in Europe, Asia, Australia and Canada.

We have many transactions denominated in foreign currencies and address certain of those financial exposures through a risk management program that includes the use of derivative financial instruments. We sell products throughout the world, often in the currency of the customer’s country, and may hedge certain of these larger foreign currency transactions when they are not transacted in the subsidiaries’ functional currency or in U.S. Dollars. The foreign currency transactions that fit our risk management policy criteria are hedged with foreign currency forward contracts. We may use other derivative instruments in the future. We enter into foreign currency forward contracts primarily to reduce the effects of fluctuating foreign currency exchange rates. We do not enter into foreign currency

forward contracts for speculative or trading purposes. The forward contracts range from one to thirteen months in maturity.

We also hedge the balance sheet exposures from our various foreign subsidiaries and business units. We enter into foreign currency forward contracts to minimize the short-term impact of currency fluctuations on assets and liabilities denominated in currencies other than the subsidiaries' functional currency or the U.S. Dollar.

The notional amounts of foreign currency forward contracts are not a measure of our exposure. The fair value of forward contracts generally reflects the estimated amounts that we would receive or pay to terminate the contracts at the reporting date, thereby taking into account and approximating the current unrealized and realized gains or losses of the open contracts. A move in foreign currency exchange rates would change the fair value of the contracts, and the fair value of the underlying exposures hedged by the contracts would change in a similar offsetting manner.

The notional values and the weighted average contractual foreign currency exchange rates of our sold and purchased foreign currency forward contracts outstanding at September 30, 2016 were as follows:

(Dollars in millions)	Notional Value Sold	Notional Value Purchased	Weighted Average Contract Rate (Foreign Currency Units per USD)
Australian Dollar	$ 21.2	$ —	1.31
Brazilian Real	7.1	—	3.28
Canadian Dollar	—	3.0	1.31
Euro	159.2	1.0	0.89
Indian Rupee	9.1	—	67.00
Japanese Yen	69.3	—	101.18
Swedish Krona	4.5	—	8.56
Swiss Franc	—	94.0	0.97
Totals	$ 270.4	$ 98.0	

Interest Rate Risk

Our market risk exposure to changes in interest rates depends primarily on our investment portfolio and borrowings. Our investment portfolio primarily consisted of cash and cash equivalents and available-for-sale investments as of September 30, 2016. The principal amount of cash and cash equivalents at September 30, 2016 totaled $843.5 million with a weighted average interest rate of 0.24%. At September 30, 2016, our available-for-sale investments included loans of $95.3 million (including accrued interest) to CPTC, which bears interest at the LIBOR plus 7.00% per annum with a minimum interest rate of 9.00% per annum. The CPTC loans are carried at fair value.

Borrowings under the 2013 Term Loan Facility accrue interest either (i) based on a Eurodollar Rate, as defined in the Credit Agreement (the “Eurodollar Rate”), plus a margin of 0.875% to 1.125% based on a leverage ratio involving funded indebtedness and EBITDA (earnings before interest, tax and depreciation and amortization), or (ii) based upon a base rate of (a) the federal funds rate plus 0.50%, (b) BofA’s announced prime rate, or (c) the Eurodollar Rate plus 1.00%, whichever is highest, plus a margin of up to 0.125% based on the same leverage ratio, depending upon instructions from the Company.

Borrowings under the 2013 Revolving Credit Facility accrue interest either (i) based on the Eurodollar Rate plus a margin of 1.125% to 1.375% based on a leverage ratio involving funded indebtedness and EBITDA, or (ii) based upon a base rate of (a) the federal funds rate plus 0.50%, (b) BofA’s announced prime rate, or (c) the Eurodollar Rate plus 1.00%, whichever is highest, plus a margin of 0.125% to 0.375% based on the same leverage ratio, depending upon instructions from the Company. Borrowings under the 2013 Revolving Credit Facility have a maturity of approximately 30 days if based on the Eurodollar Rate and the same maturity as the 2013 Term Loan Facility if based on the base rate.

We are affected by market risk exposure primarily through the effect of changes in interest rates on amounts payable under our 2013 Term Loan Facility and 2013 Revolving Credit Facility. At September 30, 2016, borrowings under the 2013 Term Loan Facility totaled $337.5 million with a weighted average interest rate of 1.65%, borrowings under the 2013 Revolving Credit Facility totaled $300.0 million with a weighted average interest rate of 1.91%. If the amount outstanding under our 2013 Credit Facility remained at this level for an entire year and interest rates increased or decreased by 1%, our annual interest expense would increase or decrease, respectively, by an additional $6.4 million. See a detailed discussion of our credit facilities in “MD&A – Liquidity and Capital Resources.”

In addition, the Sumitomo Credit Facility allows VMS KK to borrow up to a maximum amount of 3 billion Japanese Yen. Borrowings under the Sumitomo Credit Facility accrue interest based on the basic loan rate announced by the Bank of Japan plus a margin of 0.5% per annum. As of September 30, 2016, the outstanding balance under the Sumitomo Credit Facility was $29.6 million with a weighted average interest of 0.53%.

To date, we have not used derivative financial instruments to hedge the interest rate within our investment portfolio, borrowings, but may consider the use of derivative instruments in the future.

The fair value of our loans to CPTC was $95.3 million at September 30, 2016, which was estimated based on the income approach by using the discounted cash flow model with key assumptions that include discount rates corresponding to the terms and risks associated with the loan to CPTC. In addition, we do not increase the fair value above its par value as ORIX, the loan agent, has the option to purchase these loans from us under the original terms and conditions at par value. The CPTC loans are classified as Level 3 in the fair value hierarchy.

The estimated fair value of our term loan payable in fiscal year 2018, at September 30, 2016, approximated its carrying value because the term loan is carried at a market observable interest rate that resets periodically.

Although payments under certain of our operating leases for our facilities are tied to market indices, these operating leases do not expose us to material interest rate risk.

Item 8. Financial Statements and Supplementary Data
VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EARNINGS

	Fiscal Years		
(In millions, except per share amounts)	2016	2015	2014
Revenues:			
Product	$2,142.3	$2,077.9	$2,083.8
Service	1,075.5	1,021.2	966.0
Total revenues	3,217.8	3,099.1	3,049.8
Cost of revenues:			
Product	1,411.9	1,390.2	1,314.6
Service	444.6	426.2	433.5
Total cost of revenues	1,856.5	1,816.4	1,748.1
Gross margin	1,361.3	1,282.7	1,301.7
Operating expenses:			
Research and development	253.5	245.2	234.8
Selling, general and administrative	540.1	488.5	470.6
Separation costs	16.9	—	—
Litigation settlement	—	—	25.1
Total operating expenses	810.5	733.7	730.5
Operating earnings	550.8	549.0	571.2
Interest income	17.4	13.6	10.5
Interest expense	(11.8)	(7.9)	(7.2)
Earnings before taxes	556.4	554.7	574.5
Taxes on earnings	153.7	142.7	170.8
Net earnings	402.7	412.0	403.7
Less: Net earnings attributable to noncontrolling interests	0.4	0.5	—
Net earnings attributable to Varian	$402.3	$411.5	$403.7
Net earnings per share - basic	$4.22	$4.13	$3.88
Net earnings per share - diluted	$4.19	$4.09	$3.83
Shares used in the calculation of net earnings per share:			
Weighted average shares outstanding - basic	95.4	99.7	104.0
Weighted average shares outstanding - diluted	96.0	100.6	105.3

See accompanying notes to the consolidated financial statements.

VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE EARNINGS

	Fiscal Years		
(In millions)	2016	2015	2014
Net earnings	$402.7	$412.0	$403.7
Other comprehensive earnings (loss), net of tax:			
Defined benefit pension and post-retirement benefit plans:			
Net loss arising during the year, net of tax benefit of $4.3, $0.9 and $0.9	(21.4)	(4.7)	(9.6)
Prior service credit arising during the year, net of tax expense of ($0.2), $0.0 and ($1.2)	1.1	—	2.1
Amortization of prior service cost included in net periodic benefit cost, net of tax benefit (expense) of $0.2, $0.1 and ($0.1)	(0.4)	(0.2)	0.1
Amortization, settlement curtailment of net actuarial loss included in net periodic benefit cost, net of tax expense of ($0.5), ($0.6) and ($0.5)	3.5	2.9	3.4
	(17.2)	(2.0)	(4.0)
Derivative instruments:			
Change in unrealized gain (loss), net of tax benefit (expense) of $0.4, ($0.8) and ($1.4)	(0.6)	1.4	2.5
Reclassification adjustments, net of tax benefit (expense) of ($0.4), $1.4 and $0.5	0.6	(2.4)	(0.8)
	—	(1.0)	1.7
Available-for-sale securities:			
Change in unrealized loss, net of tax benefit of $0.1, $0.1 and $0.0	(0.3)	(0.1)	—
Reclassification adjustments, net of tax expense of ($0.2), $0.0 and $0.0	0.4	—	—
	0.1	(0.1)	—
Currency translation adjustment	2.8	(24.8)	(16.2)
Other comprehensive loss	(14.3)	(27.9)	(18.5)
Comprehensive earnings	388.4	384.1	385.2
Less: Comprehensive earnings attributable to noncontrolling interests	0.4	0.5	—
Comprehensive earnings attributable to Varian	$388.0	$383.6	$385.2

See accompanying notes to the consolidated financial statements.

VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

(In millions, except par values)	September 30, 2016	October 2, 2015
Assets		
Current assets:		
Cash and cash equivalents	$ 843.5	$845.5
Short-term investments	95.3	—
Accounts receivable, net of allowance for doubtful accounts of $24.4 at September 30, 2016 and $21.2 at October 2, 2015	891.8	770.9
Inventories	639.7	612.6
Prepaid expenses and other current assets	145.7	164.0
Total current assets	2,616.0	2,393.0
Property, plant and equipment, net	379.2	379.2
Goodwill	294.7	283.5
Intangible assets	104.7	72.6
Deferred tax assets	138.9	119.4
Other assets	282.5	331.0
Total assets	$ 3,816.0	$3,578.7
Liabilities, Redeemable Noncontrolling Interests and Equity		
Current liabilities:		
Accounts payable	$ 201.1	$202.9
Accrued liabilities	412.7	347.2
Deferred revenues	620.6	668.2
Short-term borrowings	329.6	108.4
Current maturities of long-term debt	50.0	50.0
Total current liabilities	1,614.0	1,376.7
Long-term debt	287.5	337.5
Other long-term liabilities	160.0	138.2
Total liabilities	2,061.5	1,852.4
Commitments and contingencies (Note 9)		
Redeemable noncontrolling interests	10.3	—
Equity:		
Varian stockholders' equity:		
Preferred stock of $1 par value: 1 shares authorized; none issued and outstanding	—	—
Common stock of $1 par value: 189.0 shares authorized; 93.7 and 98.1 shares issued and outstanding at September 30, 2016 and at October 2, 2015, respectively	93.7	98.1
Capital in excess of par value	678.6	682.2
Retained earnings	1,069.0	1,017.8
Accumulated other comprehensive loss	(100.8)	(86.5)
Total Varian stockholders' equity	1,740.5	1,711.6
Noncontrolling interests	3.7	14.7
Total equity	1,744.2	1,726.3
Total liabilities, redeemable noncontrolling interests and equity	$ 3,816.0	$3,578.7

See accompanying notes to the consolidated financial statements.

VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Fiscal Years		
(In millions)	2016	2015	2014
Cash flows from operating activities:			
Net earnings	$402.7	$412.0	$403.7
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Share-based compensation expense	48.3	46.3	39.6
Tax benefits from exercises of share-based payment awards	3.0	12.6	10.9
Excess tax benefits from share-based compensation	(3.9)	(12.6)	(10.9)
Depreciation	64.2	60.1	57.7
Amortization of intangible assets	15.6	8.4	4.8
Deferred taxes	(23.9)	5.4	15.9
Impairment charges	2.2	—	7.7
Provision for doubtful accounts receivable	3.5	1.1	7.2
Other, net	2.1	1.4	0.4
Changes in assets and liabilities, net of effects of acquisitions:			
Accounts receivable	(168.3)	(79.4)	(74.5)
Inventories	(27.7)	(41.6)	(43.3)
Prepaid expenses and other assets	8.0	(8.2)	(3.3)
Accounts payable	9.7	6.5	2.0
Accrued liabilities and other long-term liabilities	61.0	(14.0)	(0.8)
Deferred revenues	(40.2)	71.6	31.9
Net cash provided by operating activities	356.3	469.6	449.0
Cash flows from investing activities:			
Purchases of property, plant and equipment	(80.4)	(91.4)	(89.6)
Acquisitions, net of cash acquired	(21.1)	(95.3)	(31.5)
Issuance of notes receivable	(21.7)	(23.7)	(5.5)
Sale of notes receivable	8.3	—	—
Sale of available-for-sale securities	8.6	0.6	38.1
Investment in available-for-sale securities	(3.3)	(1.8)	(45.2)
Other	0.4	0.7	0.6
Net cash used in investing activities	(109.2)	(210.9)	(133.1)
Cash flows from financing activities:			
Repurchases of common stock	(461.3)	(422.0)	(627.7)
Proceeds from issuance of common stock to employees	60.6	91.0	99.7
Excess tax benefits from share-based compensation	3.9	12.6	10.9
Employees' taxes withheld and paid for restricted stock and restricted stock units	(11.0)	(16.3)	(8.8)
Borrowings under credit facility agreement	83.0	145.0	—
Repayments under credit facility agreement and other bank borrowings	(133.0)	(195.0)	(68.8)
Net borrowings under the credit facility agreements with maturities less than 90 days	217.1	108.6	—
Contingent consideration and hold back	(5.6)	(3.4)	(0.7)
Other	0.5	2.8	(0.1)
Net cash used in financing activities	(245.8)	(276.7)	(595.5)
Effects of exchange rate changes on cash and cash equivalents	(3.3)	14.2	11.0
Net decrease in cash and cash equivalents	(2.0)	(3.8)	(268.6)
Cash and cash equivalents at beginning of period	845.5	849.3	1,117.9
Cash and cash equivalents at end of period	$843.5	$845.5	$849.3

See accompanying notes to the consolidated financial statements.

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EQUITY

(In millions)	Common Stock Shares	Common Stock Amount	Capital in Excess of Par Value	Retained Earnings	Accumulated Other Comprehensive Loss	Total Varian Stockholders' Equity	Noncontrolling Interests	Total Equity
Balances at September 27, 2013	106.5	$106.5	$ 637.1	$1,010.3	$ (40.1)	$ 1,713.8	$ —	$1,713.8
Net earnings	—	—	—	403.7	—	403.7	—	403.7
Other comprehensive loss	—	—	—	—	(18.5)	(18.5)	—	(18.5)
Issuance of common stock	2.3	2.3	97.4	—	—	99.7	—	99.7
Tax benefits from exercises of share-based payment awards	—	—	10.9	—	—	10.9	—	10.9
Shares repurchased for tax withholdings on vesting of restricted stock and restricted stock units	(0.1)	(0.1)	(8.7)	—	—	(8.8)	—	(8.8)
Share-based compensation expense	—	—	39.6	—	—	39.6	—	39.6
Repurchases of common stock	(7.7)	(7.7)	(133.5)	(482.8)	—	(624.0)	—	(624.0)
Balances at September 26, 2014	101.0	101.0	642.8	931.2	(58.6)	1,616.4	—	1,616.4
Net earnings	—	—	—	411.5	—	411.5	0.5	412.0
Other comprehensive loss	—	—	—	—	(27.9)	(27.9)	—	(27.9)
Issuance of common stock	2.1	2.1	88.9	—	—	91.0	—	91.0
Tax benefits from exercises of share-based payment awards	—	—	12.6	—	—	12.6	—	12.6
Shares repurchased for tax withholdings on vesting of restricted stock and restricted stock units	(0.2)	(0.2)	(16.1)	—	—	(16.3)	—	(16.3)
Share-based compensation expense	—	—	46.3	—	—	46.3	—	46.3
Repurchases of common stock	(4.8)	(4.8)	(92.3)	(324.9)	—	(422.0)	—	(422.0)
Acquisition of MeVis Medical Solutions AG	—	—	—	—	—	—	10.2	10.2
Capital contributions by minority shareholders	—	—	—	—	—	—	4.0	4.0
Balances at October 2, 2015	98.1	98.1	682.2	1,017.8	(86.5)	1,711.6	14.7	1,726.3
Net earnings	—	—	—	402.3	—	402.3	(0.1)	402.2
Other comprehensive loss	—	—	—	—	(14.3)	(14.3)	—	(14.3)
Issuance of common stock	1.4	1.4	60.5	—	—	61.9	—	61.9
Tax benefits from exercises of share-based payment	—	—	3.0	—	—	3.0	—	3.0

awards								
Shares repurchased for tax withholdings on vesting of restricted stock and restricted stock units	(0.1)	(0.1)	(10.9)	—	—	(11.0)	—	(11.0)
Share-based compensation expense	—	—	48.3	—	—	48.3	—	48.3
Repurchases of common stock	(5.7)	(5.7)	(104.5)	(351.1)	—	(461.3)	—	(461.3)
Reclassification of noncontrolling interests in MeVis Medical Solutions AG to redeemable noncontrolling interests	—	—	—	—	—	—	(10.4)	(10.4)
Other	—	—	—	—	—	—	(0.5)	(0.5)
Balances at September 30, 2016	93.7	$93.7	$ 678.6	$1,069.0	$ (100.8)	$ 1,740.5	$ 3.7	$1,744.2

See accompanying notes to the consolidated financial statements.

VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Description of Business

Varian Medical Systems, Inc. (“VMS”) and subsidiaries (collectively, the “Company”) designs, manufactures, sells and services hardware and software products for treating cancer with radiotherapy, stereotactic radiosurgery, stereotactic body radiotherapy, and brachytherapy. The Company also designs, manufactures, sells and services X-ray imaging components for use in a range of applications, including radiographic or fluoroscopic imaging, mammography, special procedures, computed tomography, computer-aided diagnostics and industrial applications. In addition, the Company designs, manufactures, sells and services linear accelerators, image processing software and image detection products for security and inspection purposes. The Company also develops, designs, manufactures, sells and services proton therapy products and systems for cancer treatment.

On May 23, 2016, the Company announced its intention to separate its Imaging Components business from the remainder of its businesses through a pro rata distribution of the common stock of a new entity, named Varex Imaging Corporation (“Varex”). Varex was incorporated in Delaware on July 18, 2016 for the purpose of holding the assets and liabilities associated with the Company's Imaging Components business. Following the separation and distribution, Varex will be an independent, publicly traded company. The distribution is subject to certain conditions, including, among others, final approval of the Varian board of directors, receipt of one or more opinions with respect to certain U.S. federal income tax matters relating to the separation and the Securities and Exchange Commission ("SEC") declaring the effectiveness of the registration statement. There can be no assurance regarding the ultimate timing of the proposed transaction. In fiscal year 2016, the Company incurred $16.9 million of costs relating to the separation. Separation costs include expenses for transaction advisory services, consulting services, restructuring and other expenses.

Basis of Presentation

The consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States (“GAAP”).

Reclassifications

In the third quarter of fiscal year 2016, the Company began presenting all deferred tax assets and liabilities as noncurrent on its Consolidated Balance Sheets and adjusted prior year amounts as discussed further in "Accounting Pronouncements Recently Adopted" below. In addition, certain other reclassifications have been made to the amounts for prior years in order to conform to the current year’s presentation.

Fiscal Year

The fiscal years of the Company as reported are the 52- or 53-week periods ending on the Friday nearest September 30. Fiscal year 2016 was the 52-week period that ended on September 30, 2016. Fiscal year 2015 was the 53-week period that ended on October 2, 2015 and fiscal year 2014 was the 52-week period that ended on September 26, 2014.

Distribution

On April 2, 1999, Varian Associates, Inc. reorganized into three separate publicly traded companies by spinning off, through a tax-free distribution, two of its businesses to stockholders (the “Spin-offs”). The Spin-offs resulted in the following three companies: 1) the Company (renamed from Varian Associates, Inc. to Varian Medical Systems, Inc. following the Spin-offs); 2) Varian, Inc. (“VI”), which became a wholly owned subsidiary of Agilent Technologies Inc. in May 2010; and 3) Varian Semiconductor Equipment Associates, Inc. (“VSEA”), which became a wholly owned subsidiary of Applied Materials, Inc. in November 2011. The Spin-offs resulted in a non-cash dividend to stockholders.

In connection with the Spin-offs, the Company, VI and VSEA also entered into various agreements that set forth the principles to be applied in separating the companies and allocating certain related costs and specified portions of contingent liabilities. See Note 9, "Commitments and Contingencies" for additional information.

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Principles of Consolidation

The consolidated financial statements include those of VMS and its wholly-owned and majority-owned or controlled subsidiaries. Intercompany balances, transactions and stock holdings have been eliminated in consolidation.

Consolidation of Variable Interest Entities

For entities in which the Company has variable interests, the Company focuses on identifying which entity has the power to direct the activities that most significantly impact the variable interest entity's economic performance and which enterprise has the obligation to absorb losses or the right to receive benefits from the variable interest entity. If the Company is the primary beneficiary of a variable interest entity, the assets, liabilities, and results of operations of the variable interest entity will be included in the Company's Consolidated Financial Statements. For fiscal years 2016, 2015 and 2014, the Company did not consolidate any variable interest entities because the Company was not the primary beneficiary.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

Foreign Currency Translation

The Company uses the U.S. dollar predominately as the functional currency of its foreign subsidiaries. For foreign subsidiaries where the U.S. dollar is the functional currency, gains and losses from remeasurement of foreign currency balances into U.S. dollars are included in the Consolidated Statements of Earnings. The aggregate net gains (losses) resulting from foreign currency transactions and remeasurement of foreign currency balances into U.S. dollars that were included in the Consolidated Statements of Earnings were $1.6 million, $(2.0) million and $(0.5) million in fiscal years 2016, 2015 and 2014, respectively. For the foreign subsidiary where the local currency is the functional currency, translation adjustments of foreign currency financial statements into U.S. dollars are recorded to a separate component of accumulated other comprehensive income (loss). See Note 8, "Derivative Instruments and Hedging Activities" regarding the Company's hedging activities and derivative instruments. Also see Note 3, "Fair Value" regarding valuation of the Company's derivative instruments.

Cash and Cash Equivalents

The Company considers currency on hand, demand deposits, time deposits, and all highly liquid investments with an original maturity of three months or less at the date of purchase to be cash and cash equivalents. Cash and cash equivalents are held in various financial institutions in the United States and internationally.

Fair Value

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. There is a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. This hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair value are as follows:

Level 1 — Quoted prices in active markets for identical assets or liabilities.

Level 2 — Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

See Note 3, "Fair Value" for additional discussions.

Available-For-Sale Investments and Notes Receivable

The Company has investments in securities that are classified as available-for-sale investments, and which are reflected on the Consolidated Balance Sheets at fair value. Unrealized gains and losses on these investments are included as a separate component of accumulated other comprehensive loss, net of tax, on the Consolidated Balance Sheets. The Company classifies its available-for-sale securities as short-term or long-term based on the nature of the investment, its maturity date and its availability for use in current operations. The Company monitors its available-for-sale securities for possible other-than-temporary impairment when business events or changes in circumstances indicate that the carrying value of the investment may not be recoverable. The Company did not record any impairment of its available-for-sale investments for fiscal years 2016, 2015 and 2014.

The Company advances notes to third parties, including its customers. The Company regularly assesses these notes for collectability by considering internal factors such as historical experience, credit quality, age of the note balances as well as external factors such as economic conditions that may affect the note holder's ability to pay.

Investments in Privately-Held Companies

Equity investments in privately-held companies in which the Company holds at least a 20% ownership interest or in which the Company has the ability to exercise significant influence are accounted for under the equity method of accounting. Equity investments in privately-held companies in which the Company holds less than a 20% ownership interest and does not have the ability to exercise significant influence are accounted for under the cost method of accounting. The Company’s equity investments in privately-held companies are included in other assets on the Consolidated Balance Sheets. See Note 2, “Balance Sheet Components”. The Company monitors these equity investments for impairment and makes appropriate reductions in carrying values if the Company determines that impairment charges are required based primarily on the financial condition and near-term prospects of these companies.

The carrying value of equity investments in privately-held companies accounted for under the equity method of accounting was $49.3 million and $49.7 million for the fiscal years ended September 30, 2016 and October 2, 2015, respectively. The Company did not have any impairment loss on equity investments in privately-held companies accounted for under the equity method of accounting for fiscal years 2016, 2015 and 2014. Additionally, the Company has an investment in Augmenix, Inc. (“Augmenix”), a privately-held company, which is accounted for under the cost-method. During fiscal year 2014, the Company recognized a $7.7 million charge relating to the impairment of a portion of the investment in Augmenix. Equity investments accounted for under the cost-method, including Augmenix, totaled $18.7 million and $15.0 million for the fiscal years ended September 30, 2016 and October 2, 2015, respectively.

Concentration of Credit Risk

Financial instruments that potentially expose the Company to concentrations of credit risk consist principally of cash, cash equivalents, available-for-sale investments, trade accounts receivable, notes receivable, and derivative financial instruments used in hedging activities. Cash and cash equivalents held with financial institutions may exceed the Federal Deposit Insurance Corporation insurance limits or similar limits in foreign jurisdictions. The Company has not experienced any losses on its deposits of cash and cash equivalents. With respect to its available-for-sale investments and notes receivable, the Company performs a periodic credit evaluation of various counterparties. In addition, the Company will be exposed to credit loss in the event of nonperformance by counterparties on the foreign currency forward contracts used in hedging activities. The Company transacts its foreign currency forward contracts with several large international and regional financial institutions and, therefore, does not consider the risk of nonperformance to be concentrated in any specific counterparty. The Company has not experienced any losses resulting from the failure of counterparty to meet its financial obligations under foreign currency forward contracts.

Concentrations of credit risk with respect to trade accounts receivable are limited due to the large number of customers comprising the Company’s customer base and their geographic dispersion. The Company performs ongoing credit evaluations of its customers and, except for government tenders, group purchases and orders with a letter of credit, often requires its Oncology Systems, security and inspection products and Varian Particle Therapy (“VPT”) customers to provide a down payment. The Company maintains an allowance for doubtful accounts based upon the

expected collectability of all accounts receivable. No single customer represented more than 10% of the accounts receivable amount for any period presented.

Inventories

Inventories are valued at the lower of cost or market (realizable value). Excess and obsolete inventories are determined primarily based on future demand forecasts and write-downs of excess and obsolete inventories are recorded as a component of

cost of revenues. Cost is computed using standard cost (which approximates actual cost) or actual cost on a first-in-first-out or average basis.

Property, Plant and Equipment

Property, plant and equipment are stated at cost, net of accumulated depreciation. Major improvements are capitalized, while repairs and maintenance are expensed as incurred. Costs incurred for internal use software during the application development stage are capitalized in accordance with guidance on internal-use software. Internally developed software primarily includes enterprise-level business software that the Company customizes to meet its specific operational needs. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets. Land is not subject to depreciation, but land improvements are depreciated over fifteen years. Land leasehold rights and leasehold improvements are amortized over the lesser of their estimated useful lives or remaining lease terms. Buildings are depreciated over twenty or thirty years. Machinery and equipment are depreciated over their estimated useful lives, which range from three to seven years. Assets subject to lease are amortized over the lesser of their estimated useful lives or remaining lease terms. When assets are retired or otherwise disposed of, the assets and related accumulated depreciation are removed from the accounts. Gains or losses resulting from retirements or disposals of property, plant and equipment are included in operating expenses.

Goodwill and Intangible Assets

Goodwill is recorded when the purchase price of an acquisition exceeds the fair value of the net identified tangible and intangible assets acquired. Purchased intangible assets are carried at cost, net of accumulated amortization. Intangible assets with finite lives are amortized primarily using the straight-line method over their estimated useful lives which generally range from two to ten years. In-process research and development (“IPR&D”) is initially capitalized at fair value as an intangible asset with an indefinite life and assessed for impairment thereafter. When an IPR&D project is completed, the IPR&D is reclassified as an amortizable purchased intangible asset and amortized over the asset’s estimated useful life.

Impairment of Long-lived Assets, Goodwill and Intangible Assets

The Company reviews long-lived assets and identifiable intangible assets with finite lives for impairment whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable. The Company assesses these assets for impairment based on their estimated undiscounted future cash flows. If the carrying value of the assets exceeds the estimated future undiscounted cash flows, the Company recognizes an impairment loss based on the excess of the carrying amount over the fair value of the assets. The Company did not recognize any impairment charges for long-lived assets and identifiable intangible assets in fiscal years 2016, 2015 and 2014.

The Company evaluates goodwill for impairment at least annually or whenever an event occurs or circumstances changes that would more likely than not reduce the fair value of a reporting unit below its carrying amount. If the Company determines that a quantitative analysis is necessary, the impairment test for goodwill is a two-step process. Step one consists of a comparison of the fair value of a reporting unit against its carrying amount, including the goodwill allocated to each reporting unit. The Company determines the fair value of its reporting units based on a combination of income and market approaches. The income approach is based on the present value of estimated future cash flows of the reporting units and the market approach is based on a market multiple calculated for each business unit based on market data of other companies engaged in similar business. If the carrying amount of the reporting unit is in excess of its fair value, step two requires the comparison of the implied fair value of the reporting unit’s goodwill against the carrying amount of the reporting unit’s goodwill. Any excess of the carrying value of the reporting unit’s goodwill over the implied fair value of the reporting unit’s goodwill is recorded as an impairment loss.

In fiscal years 2016, 2015 and 2014, the Company performed the annual goodwill impairment testing for the four reporting units that carried goodwill namely (i) Oncology Systems, (ii) X-ray tubes and flat panel products, (iii) Security and inspection products, and (iv) VPT, and found no impairment. Based upon the most recent annual goodwill analysis performed by the Company during the fourth quarter of fiscal year 2016, for Oncology Systems, X-ray tubes and flat panel products, and Security and inspection products reporting units, step one of the impairment test was not completed based on evaluation of qualitative factors, and for the VPT reporting unit for which step one was completed, the fair value was substantially in excess of carrying value.

Loss Contingencies

From time to time, the Company is a party to or otherwise involved in legal proceedings, claims and government inspections or investigations and other legal matters, both inside and outside the United States, arising in the ordinary course of its business or

otherwise. The Company accrues amounts, to the extent they can be reasonably estimated, that it believes are adequate to address any liabilities related to legal proceedings and other loss contingencies that it believes will result in a probable loss.

Environmental remediation liabilities are recorded when environmental assessments and/or remediation efforts are probable, and the costs of these assessments or remediation efforts can be reasonably estimated.

Product Warranty

The Company warrants most of its products for a specific period of time, usually 12 months from installation, against material defects. The Company provides for the estimated future costs of warranty obligations in cost of revenues when the related revenues are recognized. The accrued warranty costs represent the best estimate at the time of sale of the total costs that the Company will incur to repair or replace product parts that fail while still under warranty. The amount of the accrued estimated warranty costs obligation for established products is primarily based on historical experience as to product failures adjusted for current information on repair costs. For new products, estimates include the historical experience of similar products, as well as reasonable allowance for warranty expenses associated with new products. On a quarterly basis, the Company reviews the accrued warranty costs and updates the historical warranty cost trends, if required.

Revenue Recognition

The Company’s revenues are derived primarily from the sale of hardware and software products, and services from the Company’s Oncology Systems, Imaging Components and VPT businesses. The Company recognizes its revenues net of any value added or sales tax and net of sales discounts.

Many of the Company’s revenue arrangements consist of multiple deliverables of its software and non-software products, as well as related services. In Oncology Systems, the linear accelerators are often sold with hardware and software accessory products that enhance efficiency and enable delivery of advanced radiotherapy and radiosurgery treatments. Many of the Oncology Systems hardware and software accessory products are occasionally sold on a stand-alone basis. As discussed below, the majority of the Oncology Systems products are sold with installation obligations. Delivery of different elements in a revenue arrangement often span more than one reporting period. For example, a linear accelerator may be delivered in a reporting period but the related installation is completed in a later period. The Imaging Components business generally sells its X-ray components (including X-ray tubes, flat panel detectors and image processing tools and security and inspection products) on a stand-alone basis. However, the Imaging Components business occasionally sells its flat panel detectors, X-ray tubes and imaging processing tools as a package that is optimized for digital X-ray imaging and sells its Linatron® X-ray accelerators together with its imaging processing software and image detection products to original equipment manufacturer (“OEM”) customers that incorporate them into their inspection systems. Service contracts are often sold with Oncology Systems products, as well as with certain security and inspection products within the Imaging Components business. Revenues related to service contracts usually starts after the expiration of the warranty period for non-software products or upon acceptance for software products.

The Company recognizes contract revenues under the percentage-of-completion method for equipment sold by VPT. See “Contracts for Customized Equipment” below for more details.

For a multiple element arrangement that includes software and non-software deliverables which includes service contracts, the Company first allocates revenues among the software and non-software deliverables on a relative selling price basis. The amounts allocated to the non-software products and software are accounted for as follows:

Non-software Products

Non-software products include hardware products, software components that function together with the hardware components to deliver the product’s essential functionality, as well as service contracts. Except as described below under “Service,” the Company recognizes revenues for non-software products when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured.

For multiple element revenue arrangements that involve non-software products, a delivered non-software element is considered as a separate unit of accounting when it has stand-alone value and there is no customer-negotiated refund

or return rights for the delivered element. The allocation of revenue to all deliverables based on their relative selling prices is determined at the inception of the arrangement. The selling price for each deliverable is determined using vendor-specific objective evidence ("VSOE") of selling price, if it exists; otherwise, third-party evidence of selling price ("TPE"). If neither VSOE nor TPE of selling price exists for a deliverable the Company uses the deliverable's estimated selling prices ("ESP").

The Company's non-software products have stand-alone value because they are sold separately. Product installation, which is a standard process and does not involve changes to the features or capabilities of the Company's products, is considered as a separate unit of accounting. Installation of Oncology Systems non-software products involves the Company's testing of each product at its factory prior to the product's delivery to ensure that the product meets the Company's published specifications. Once these tests establish that the specifications have been met, the product is then disassembled and shipped to the customer's site as specified in the customer contract. Risk of loss is transferred to the customer typically at the time of shipment or delivery, depending upon the terms of the contract. At the customer's site, the product is reassembled, installed and retested in accordance with the Company's installation procedures to ensure and demonstrate compliance with the Company's published specifications for that product.

Under the terms of the Company's standard non-software sales contracts, "acceptance" of a non-software product with installation obligations is deemed to have occurred upon the earliest of (i) completion of product installation and testing in accordance with the Company's standard installation procedures showing compliance with the Company's published specifications for that product, (ii) receipt by the Company of an acceptance form executed by the customer acknowledging installation and compliance with the Company's published specifications for that product, (iii) use by the customer of the product for any purpose after its delivery or (iv) six months after the delivery of the product to the customer by the Company. The contracts allow for cancellation only by mutual agreement, thus the customer does not have a unilateral right to return the delivered non-software product.

The Company establishes VSOE of selling price based on the price charged for a deliverable when sold separately. Occasionally for a deliverable not yet being sold separately, the Company may initially establish VSOE by management having the relevant authority. As discussed above, many products are occasionally sold in stand-alone arrangements and accordingly may have VSOE of selling price. Service contracts are sold separately through either original sale or subsequent renewal of annual contracts. The Company establishes TPE generally by evaluating the Company's and competitors' largely interchangeable competing products or services in stand-alone sales to similarly situated customers. The TPE for product installation is determined based on the estimated labor hours and the prevailing hourly rate charged for similar services, as well as the prices charged by outside vendors for installation of the Company's products. For certain products for which the Company is not able to establish VSOE or TPE of selling prices, ESPs are used as the basis of their selling prices. The Company estimates selling prices following an established process that considers market conditions, including the product offerings and pricing strategies of competitors, as well as internal factors such as historical pricing practices and margin objectives. The establishment of product and service ESPs is controlled and reviewed by the appropriate level of management in all of the Company's businesses.

The Company limits the amount of revenue recognized for delivered items to the amount that is not contingent upon the delivery of additional products or services. For Oncology Systems non-software products with installation obligations, the Company recognizes as revenues a portion of the product purchase price upon transfer of risk of loss and defers revenue recognition on the portion associated with product installation, provided that all other criteria for revenue recognition have been met. The portion deferred is the greater of the relative selling price of the installation services for such products or the amount of payment contractually linked to product installation services.

The Company does not have installation obligations for X-ray tubes, digital image detectors, spare parts, security and inspection products, and for certain hardware Oncology Systems. For the products that do not include installation obligations, the Company recognizes revenues upon the transfer of risk of loss, which is either at the time of shipment or delivery, depending upon the terms of the contract, provided that all other revenue recognition criteria have been met.

Software Products

The Company recognizes revenues for software products in accordance with the software revenue recognition guidance. The Company recognizes license revenues when all of the following criteria have been met: persuasive evidence of an arrangement exists, the vendor's fee is fixed or determinable, collection of the related receivable is probable, delivery of the product has occurred and the Company has received from the customer an acceptance form acknowledging installation and substantial conformance with the Company's specifications (as set forth in the user manual) for such product, or upon verification of installation when customer acceptance is not required to be received,

or upon the expiration of an acceptance period, provided that all other criteria for revenue recognition have been met. Revenues earned on software arrangements involving multiple elements are allocated to each element based on VSOE of fair value, which is based on the price charged when the same element is sold separately. In instances when evidence of VSOE of fair value of all undelivered elements exists, but evidence does not exist for one or more delivered elements, revenues are recognized using the residual method. Under the residual method, the fair value of the undelivered elements is deferred and the

remaining portion of the arrangement fee is recognized as revenue. Revenue allocated to maintenance and support is recognized ratably over the maintenance term (typically one year).

For those software products that are not sold stand-alone or for which VSOE cannot be established or maintained, all software revenue under the contract will be deferred until the software product(s) that lack VSOE are all delivered. If the only undelivered software element that lacks VSOE is maintenance and support then the software and maintenance revenue would be recognized ratably over the term of the maintenance and support arrangement.

Installation of the Company's software products may involve a certain amount of customer-specific implementation to enable the software product to function within the customer's operating environment (i.e., with the customer's information technology network and other hardware, with the customer's data interfaces and with the customer's administrative processes) and substantially in conformance with the Company's specifications (as set forth in the user manual) for such product. With these software products, customers do not have full use of the software (i.e., functionality) until the software is installed as described above and functioning within the customer's operating environment. Therefore, the Company recognizes 100% of such software revenues upon receipt from the customer of the Company's acceptance form acknowledging installation and such substantial conformance, or upon verification of installation when the Company is not required to receive customer acceptance, or upon the expiration of an acceptance period, provided that all other criteria for revenue recognition have been met.

The Company does not have installation obligations for Imaging Components and certain brachytherapy software products. For software products that do not include installation obligations, the Company recognizes revenues upon the transfer of risk of loss, which is either at the time of shipment or delivery, depending upon the shipping terms of the contract, provided that all other criteria for revenue recognition have been met.

Contracts for Customized Equipment

Revenues related to proton therapy systems and proton therapy system commissioning contracts are recognized in accordance with contract accounting. The Company recognizes contract revenues under the percentage-of-completion method which are based on contract costs incurred to date compared with total estimated contract costs. Changes in estimates of total contract revenue, total contract cost or the extent of progress towards completion are recognized in the period in which the changes in estimates are identified. Estimated losses on contracts are recognized in the period in which the loss is identified. In circumstances in which the final outcome of a contract cannot be precisely estimated but a loss on the contract is not expected, the Company recognizes revenues under the percentage-of-completion method based on a zero profit margin until more precise estimates can be made. If and when the Company can make more precise estimates, revenues and costs of revenues are adjusted in the same period.

Contracts accounted for in accordance with contract accounting are billable upon achievement of milestones specified in the contracts or upon customer acceptance. Costs incurred and revenues recognized under the percentage-of-completion method in excess of customer billings are included in accounts receivable and other assets on the Consolidated Balance Sheets. Customer billings in excess of costs incurred and revenue recognized under the percentage-of-completion method, which typically reflect initial down payments, are included in deferred revenues on the Consolidated Balance Sheets. Costs incurred and revenues recognized in excess of customer billings were $111.6 million as of September 30, 2016 and $79.1 million as of October 2, 2015. Customer billings in excess of costs incurred and revenue recognized were $13.7 million as of September 30, 2016 and $53.8 million as of October 2, 2015.

Service

Service revenues include revenues from hardware and software service contracts, bundled support arrangements, paid services and trainings, and parts that are sold by the service department. Revenues allocated to service contracts are generally recognized ratably over the period of the related contracts. For proton therapy systems service contracts, revenues subject to certain penalty provisions are deferred until reliable estimates can be made or the related penalty provisions lapse. Revenues related to services performed on a time-and-materials basis are recognized when they are earned and billable.

Deferred Revenues

Deferred revenues include (i) the amount billed, billable or received applicable to non-software products for which installation and/or acceptance have not been completed (ii) the amount billed, billable or received applicable to shipment of software products but for which installation and/or final acceptance have not been completed and (iii) the amount billed, billable or received for service contracts for which the services have not been rendered. Deferred costs associated with deferred revenues are included in inventories on the Consolidated Balance Sheets. Except for government tenders, group purchases and orders with letters of credit, the Company typically requires its Oncology Systems, security and inspection and VPT customers to provide a down payment prior to transfer of risk of loss of ordered products. These payments are also recorded as deferred revenues on the Consolidated Balance Sheets.

Share-Based Compensation Expense

The Company measures and recognizes compensation expense for all share-based payment awards made to employees and directors, including stock options, employee stock purchases related to the Varian Medical Systems, Inc. Employee Stock Purchase Plan (the “Employee Stock Purchase Plan”), deferred stock units, restricted stock, restricted stock units and performance units based on their fair values.

Share-based compensation expense recognized in the Consolidated Statements of Earnings includes compensation expense for the share-based payment awards based on the grant date fair value estimated in accordance with the guidance on share-based compensation. The Company values VMS’s stock options granted and the option component of the shares of VMS common stock purchased under the Employee Stock Purchase Plan using the Black-Scholes option-pricing model, which was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. Share-based compensation expense for restricted common stock, restricted stock units and deferred stock units is measured at the stock’s fair value on the date of grant and is amortized over each award’s respective service period. The Company values performance units using the Monte Carlo simulation model on the date of grant with assumptions that includes the historical volatility of shares of VMS common stock, as well as the shares of common stock of peer companies. In addition, the Company estimates the probability that certain performance conditions that affect the vesting of performance units will be achieved, and recognizes expense only for those awards expected to vest. Both the Black-Scholes option-pricing model and the Monte Carlo simulation model require the input of certain assumptions and changes in the assumptions can materially affect the fair value estimates of share-based payment awards.

Share-based compensation expense recognized is based on the value of the portion of share-based payment awards that is ultimately expected to vest. The Company attributes the value of share-based compensation to expense using the straight-line method. The Company considers only the direct tax impacts of share-based compensation awards when calculating the amount of tax windfalls or shortfalls.

Earnings per share

Basic net earnings per share is computed by dividing net earnings attributable to Varian by the weighted average number of shares of VMS common stock outstanding for the period. Diluted net earnings per share is computed by dividing net earnings attributable to Varian by the sum of the weighted average number of common shares outstanding and dilutive common shares under the treasury stock method. The Company excludes potentially dilutive common shares (consisting of shares underlying stock options, restricted stock units, performance units and the Employee Stock Purchase Plan) from the computation of diluted weighted average shares outstanding if the per share value, either the exercise price of the awards or the sum of (a) the exercise price of the awards and (b) the amount of the compensation cost attributed to future services and not yet recognized and (c) the amount of tax benefit or shortfall that would be recorded in additional paid-in capital when the award becomes deductible, is greater than the average market price of the shares, because the inclusion of the shares underlying these stock awards would be antidilutive to earnings per share.

Shipping and Handling Costs

Shipping and handling costs are included as a component of cost of revenues.

Research and Development

Research and development costs have been expensed as incurred. These costs primarily include employees' compensation, consulting fees, material costs and research grants.

Software Development Costs

Costs for the development of new software products and substantial enhancements to existing software products are expensed as incurred until technological feasibility has been established, at which time any additional costs would be capitalized. No costs associated with the development of software have been capitalized as the Company believes its current software development process is essentially completed concurrent with the establishment of technological feasibility.

Comprehensive Earnings

Comprehensive earnings include all changes in equity (net assets) during a period from non-owner sources. Comprehensive earnings include currency translation adjustments, change in unrealized gain or loss on derivative instruments designated as cash flow hedges, net of taxes (see Note 8, "Derivative Instruments and Hedging Activities"), change in unrealized gain or loss on available for sale securities, net of taxes (see Note 2, "Balance Sheet Components"), and adjustments to and amortization of unrecognized actuarial gain or loss, unrecognized transition obligation and unrecognized prior service cost of our defined benefit pension and post-retirement benefit plans (see Note 10, "Retirement Plans").

Taxes on Earnings

Taxes on earnings are based on pretax financial accounting income. Deferred tax assets and liabilities are recorded based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse.

Accounting Pronouncement Recently Adopted

In November 2015, the Financial Accounting Standards Board ("FASB") issued an amendment to its accounting guidance related to balance sheet classification of deferred taxes. The amendment requires that deferred tax assets and liabilities be classified as noncurrent in the Consolidated Balance Sheets. The amendment is effective for all annual periods, and interim periods within those annual periods, beginning after December 15, 2016, with early adoption permitted. The Company adopted this amendment in the third quarter of fiscal year 2016, on a retrospective basis. To conform to the current year presentation, the Company decreased current deferred tax assets by $132.1 million and current deferred tax liabilities, which was included in accrued liabilities, by $6.3 million and increased long-term deferred tax assets by $110.0 million and decreased deferred tax liabilities, which was included in other long-term liabilities, by $15.8 million, on its Consolidated Balance Sheet as of October 2, 2015. The adoption of this amendment had no impact to the Company’s Consolidated Statements of Earnings or Statements of Cash Flows.

Recent Accounting Standards or Updates Not Yet Effective

In November 2016, the FASB amended its guidance on the classification and presentation of restricted cash in the statement of cash flow. The amendment requires entities to include restricted cash and restricted cash equivalents in its cash and cash equivalents in the statement of cash flow. The amendment will be effective for the Company beginning in its first quarter of fiscal year 2019 with early adoption permitted. The amendment is required to be adopted retrospectively. The Company is evaluating the impact of adopting this amendment to its consolidated financial statements.

In October 2016, the FASB amended its guidance for tax accounting for intra-entity asset transfers. The amendment removes the prohibition against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. The amendment will be effective for the Company beginning in its first quarter of fiscal year 2019. Early adoption is permitted. The amendment is required to be adopted on a modified retrospective basis. The Company is evaluating the impact of adopting this amendment to its consolidated financial statements.

In August 2016, the FASB issued an amendment to its accounting guidance related to the classification of certain cash receipts and cash payments. The amendment was issued to reduce the diversity in practice in how certain transactions are classified in the statement of cash flows. The amendment will be effective for the Company beginning in its first quarter of fiscal year 2019 with early adoption permitted. The amendment is required to be adopted retrospectively unless it is impracticable. The Company is evaluating the impact of adopting this amendment to its consolidated financial statements.

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In June 2016, the FASB issued an amendment to its accounting guidance related to impairment of financial instruments. The amendment adds a new impairment model that is based on expected losses rather than incurred losses. The amendment will be effective for the Company beginning in its first quarter of fiscal year 2021 with early adoption permitted beginning in the first quarter of fiscal year 2020. The Company is evaluating the impact of adopting this amendment to its consolidated financial statements.

In March 2016, the FASB issued an amendment to its accounting guidance related to employee share-based payments. The amendment simplifies several aspects of the accounting for employee share-based payments including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. The amendment will be effective for the Company beginning in its first quarter of fiscal year 2018 with early adoption permitted. The Company is evaluating the impact of adopting this amendment to its consolidated financial statements.

In February 2016, the FASB issued a new standard on accounting for leases. The new standard is intended to provide enhanced transparency and comparability by requiring lessees to record right-of-use assets and corresponding lease liabilities on the balance sheet. The new standard will continue to classify leases as either finance or operating, with classification affecting the pattern of expense recognition in the statement of earnings. The new standard is required to be adopted using a modified retrospective method to each prior reporting period presented with various optional practical expedients. The new standard will be effective for the Company beginning in its first quarter of fiscal year 2020 with early adoption permitted. The Company is evaluating the impact of adopting this new standard to its consolidated financial statements.

In January 2016, the FASB issued an amendment to its accounting guidance related to recognition and measurement of financial assets and financial liabilities. The amendment addresses certain aspects of recognition, measurement, presentation and disclosure of financial instruments. The amendment will be effective for the Company beginning in its first quarter of fiscal year 2019. The Company is evaluating the impact of adopting this amendment to its consolidated financial statements.

In September 2015, the FASB issued a new accounting standard that eliminates the requirement to restate prior period financial statements for measurement period adjustments following a business combination. The new standard became effective for the Company beginning in its first quarter of fiscal year 2017. The new standard is not expected to have a material impact to the Company’s consolidated financial statements.

In July 2015, the FASB issued an amendment to its accounting guidance related to inventory measurement. The amendment requires inventory measured using first-in, first-out (FIFO) or average cost to be subsequently measured at the lower of cost and net realizable value, thereby simplifying the current guidance that requires an entity to measure inventory at the lower of cost or market. The amendment will be effective for the Company beginning in its first quarter of fiscal year 2018. The amendment is not expected to have a material impact to the Company’s consolidated financial statements.

In April 2015, the FASB issued an amendment to its accounting guidance related to internal use software. The amendment clarifies that the software license element of a cloud computing arrangements should be accounted for consistent with the acquisition of other software licenses. The amendment became effective for the Company beginning in its first quarter of fiscal year 2017. The amendment is not expected to have a material impact to the Company’s consolidated financial statements.

In April 2015, the FASB issued an amendment to its accounting guidance related to retirement benefits. The amendment provides a practical expedient that permits an entity with a fiscal year-end that does not coincide with a month-end to measure defined benefit plan assets and obligations using the month-end that is closest to the entity’s fiscal year-end. The amendment also provides a practical expedient that permits an entity that has a significant event in an interim period to remeasure defined benefit plan assets and obligations using the month-end that is closest to the date of the significant event. The amendment became effective for the Company beginning in its first quarter of fiscal year 2017. The amendment is not expected to have a material impact to the Company’s consolidated financial statements.

In March 2015, the FASB issued an amendment to its accounting guidance related to presentation of debt issuance costs. The amendment requires that debt issuance costs related to a recognized debt liability be presented in the

balance sheet as a direct deduction from the carrying amount of that debt liability. The amendment will be effective for the Company beginning in its first quarter of fiscal year 2017. In August 2015, the FASB further clarified that entities are permitted to defer and present debt issuance costs related to line-of-credit arrangements as assets. These amendments are not expected to have a material impact to the Company's consolidated financial statements.

In February 2015, the FASB issued an amendment to its accounting guidance related to consolidation. The amendment modifies the analysis that a reporting entity must perform to determine whether it should consolidate certain types of legal

entities. The amendment became effective for the Company beginning in its first quarter of fiscal year 2017. The amendment is not expected to have a material impact to the Company’s consolidated financial statements.

In June 2014, the FASB issued an amendment to its accounting guidance related to stock-based compensation. The amendment requires that a performance target that could be achieved after the requisite service period be treated as a performance condition that affects vesting, rather than a condition that affects the grant-date fair value. The amendment became effective for the Company beginning in its first quarter of fiscal year 2017. The amendment is not expected to have a material impact to the Company's consolidated financial statements.

In May 2014, the FASB issued a new revenue standard, which sets forth a single, comprehensive revenue recognition model for all contracts with customers to improve comparability. The new standard requires revenue recognition to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In March 2016, the FASB amended the principal-versus-agent implementation guidance and illustrations in the new standard. In April 2016, the FASB amended the guidance on identifying performance obligations and the implementation guidance on licensing in the new standard. In May 2016, the FASB amended the guidance on collectability, noncash consideration, presentation of sales tax and transition in the new standard. The new standard will be effective for the Company beginning in its first quarter of fiscal year 2019, with early adoption permitted, but not before the first quarter of fiscal year 2018. The new standard can be applied either retrospectively to each prior reporting period presented (i.e., full retrospective adoption) or with the cumulative effect of initially applying the update recognized at the date of the initial application (i.e., modified retrospective adoption) along with additional disclosures. The Company currently anticipates adopting this standard using the full retrospective method to restate each prior period presented. The Company is evaluating the timing and the impact of adopting this standard to its consolidated financial statements.

2. BALANCE SHEET COMPONENTS

The following tables summarize the Company's available-for-sale securities (in millions):

September 30, 2016	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Available-for-sale securities:				
Corporate debt securities:				
CPTC loans	$ 95.3	$ —	$ —	$ 95.3
Total available-for-sale securities	$ 95.3	$ —	$ —	$ 95.3

October 2, 2015	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Available-for-sale securities:				
Corporate debt securities:				
CPTC loans	$ 83.9	$ —	$ —	$ 83.9
Other	8.6	0.1	(0.3)	8.4
Non-U.S. government security	0.7	—	—	0.7
Total available-for-sale securities	$ 93.2	$ 0.1	$ (0.3)	$ 93.0

See Note 16, "VPT Loans" for more information on California Proton Treatment Center, LLC (“CPTC”) loans.

As of September 30, 2016, available-for-sale securities are included in short-term investments because their maturity dates are less than one year. As of October 2, 2015, available-for-sale securities were included in other assets because their maturity dates were greater than one year, and the Company did not intend to sell all or a portion of its loans in the next fiscal year. As of September 30, 2016, the Company anticipates that it will recover the entire amortized cost basis of all of its available-for-sale securities and determined that no other-than-temporary impairments were required to be recognized.

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(In millions)	September 30, 2016	October 2, 2015
Inventories:		
Raw materials and parts	$ 407.9	$ 348.3
Work-in-process	76.7	98.2
Finished goods	155.1	166.1
Total inventories	$ 639.7	$ 612.6

(In millions)	September 30, 2016	October 2, 2015
Property, plant and equipment:		
Land and land improvements	$ 49.4	$ 49.1
Buildings and leasehold improvements	330.2	267.0
Machinery and equipment	490.4	437.2
Construction in progress	34.2	99.6
	904.2	852.9
Accumulated depreciation and amortization	(525.0)	(473.7)
Total property, plant and equipment, net	$ 379.2	$ 379.2

(In millions)	September 30, 2016	October 2, 2015
Other assets:		
Long-term available-for-sale securities	$ —	$ 93.0
Long-term receivables	113.8	77.0
Investments in privately-held companies	68.0	64.7
Deferred Compensation Plan ("DCP") assets	63.4	56.6
Other	37.3	39.7
Total other assets	$ 282.5	$ 331.0

(In millions)	September 30, 2016	October 2, 2015
Accrued liabilities:		
Accrued compensation and benefits	$ 119.8	$ 101.5
DCP liabilities	63.8	57.3
Product warranty	51.1	43.9
Income taxes payable	55.1	36.4
Other	122.9	108.1
Total accrued liabilities	$ 412.7	$ 347.2

(In millions)	September 30, 2016	October 2, 2015
Other long-term liabilities:		
Long-term income taxes payable	$ 46.2	$ 44.5
Deferred income taxes	26.6	31.8
Other	87.2	61.9
Total other long-term liabilities	$ 160.0	$ 138.2

3. FAIR VALUE

Assets/Liabilities Measured at Fair Value on a Recurring Basis

In the tables below, the Company has segregated all assets and liabilities that are measured at fair value on a recurring basis into the most appropriate level within the fair value hierarchy based on the inputs used to determine the fair value at the measurement date.

	Fair Value Measurement Using			
Type of Instruments	Quoted Prices in Active Markets for Identical Instruments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Balance
(In millions)				
Assets at September 30, 2016:				
Available-for-sale securities:				
Corporate debt securities	$—	$—	$ 95.3	$ 95.3
Total assets measured at fair value	$—	$—	$ 95.3	$ 95.3
Liabilities at September 30, 2016:				
Contingent consideration	$—	$—	$ (1.3)	$ (1.3)
Total liabilities measured at fair value	$—	$—	$ (1.3)	$ (1.3)
Assets at October 2, 2015:				
Available-for-sale securities:				
Corporate debt securities	$—	$8.4	$ 83.9	$ 92.3
Non-U.S. government security	—0.7		—	0.7
Total assets measured at fair value	$—	$9.1	$ 83.9	$ 93.0
Liabilities at October 2, 2015:				
Contingent consideration	$—	$—	$ (4.1)	$ (4.1)
Total liabilities measured at fair value	$—	$—	$ (4.1)	$ (4.1)

At September 30, 2016, and October 2, 2015, the fair value of the Company's derivative instruments were immaterial. The Company's Level 3 corporate debt securities, the CPTC loans, were included in short-term investments at September 30, 2016, and other assets at October 2, 2015 on the Consolidated Balance Sheets. The Company's Level 2 corporate debt securities and the non-U.S. government security were included in other assets at October 2, 2015 on the Consolidated Balance Sheets. The Company's contingent consideration was included in accrued liabilities at September 30, 2016 and accrued liabilities and other long-term liabilities at October 2, 2015 on the Consolidated Balance Sheets.

The fair value of the Company's Level 2 other corporate debt securities and non-U.S. government security was priced using quoted market prices for similar instruments or non-binding market prices that are corroborated by observable market data. The Company has elected to use the income approach to value its derivative instruments using standard valuation techniques and Level 2 inputs, such as currency spot rates, forward points and credit default swap spreads.

The Company's derivative instruments are generally short-term in nature, typically one month to thirteen months in duration.

The fair value of the Company's Level 3 corporate debt securities, the CPTC loans, is based on the income approach by using the discounted cash flow model with key assumptions that include discount rates corresponding to the terms and risks associated with the loans to CPTC. If the estimated discount rates used were to increase or decrease, the fair value of the debt securities would decrease or increase, respectively. However, the Company does not increase the fair value of these securities above their par values as ORIX Capital Markets, LLC ("ORIX"), the loan agent, has the option to purchase these loans from the Company under the original terms and conditions at par value.

The Company measures the fair value of its Level 3 contingent consideration liabilities based on the income approach by using a discounted cash flow model with key assumptions that include estimated sales units or revenues of the acquired business or completion of certain milestone targets during the earn-out period, volatility, and estimated discount rates corresponding to the periods of expected payments. If the estimated sales units, revenues or probability of completing certain milestones were to increase or decrease during the respective earn-out period, the fair value of the contingent consideration would increase or decrease, respectively. If the estimated discount rates were to increase or decrease, the fair value of contingent consideration would decrease or increase, respectively. Changes in volatility may result in an increase or decrease in the fair value of contingent consideration.

The following table presents the reconciliation for all assets and liabilities measured and recorded at fair value on a recurring basis using significant unobservable inputs (Level 3):

(In millions)	CPTC Loans	Contingent Consideration
Balance at September 26, 2014	$ 75.6	$ (7.5)
Additions [1]	8.3	—
Settlements [2]	—	3.3
Change in fair value recognized in earnings	—	0.1
Balance at October 2, 2015	83.9	(4.1)
Additions [1]	11.4	—
Settlements [2]	—	3.5
Change in fair value recognized in earnings	—	(0.7)
Balance at September 30, 2016	$ 95.3	$ (1.3)

[1] Amounts reported under CPTC loans represents draw downs and accrued interest.

[2] Amounts reported under Contingent Consideration represent cash payments to settle contingent consideration liabilities.

There were no transfers of assets or liabilities between fair value measurement levels during fiscal years 2016, 2015 and 2014. Transfers between fair value measurement levels are recognized at the end of the reporting period.

Fair Value of Other Financial Instruments

The fair values of certain of the Company’s financial instruments, including bank deposits included in cash equivalents, accounts receivable, net of allowance for doubtful accounts, short-term notes receivable, accounts payable, and short-term borrowings approximate their carrying amounts due to their short maturities.

As of both September 30, 2016 and October 2, 2015, the fair value of current maturities of the long-term debt approximated its carrying value of $50.0 million due to its short-term maturity. The fair value of the long-term debt, payable in installments through fiscal year 2018, approximated its carrying value of $287.5 million and $337.5 million at September 30, 2016 and October 2, 2015, respectively, because it is carried at a market observable interest rate that resets periodically and is categorized as Level 2 in the fair value hierarchy.

The fair value of the outstanding long-term notes receivable approximated their carrying value of $59.2 million and $30.9 million at September 30, 2016 and October 2, 2015, respectively, because it is based on terms of recent comparable transactions and is categorized as Level 3 in the fair value hierarchy.

4. RECEIVABLES

The following table summarizes the Company's accounts receivable and notes receivable as of September 30, 2016 and October 2, 2015:

(In millions)	September 30, 2016	October 2, 2015
Accounts receivable, gross	$ 970.8	$ 838.2
Allowance for doubtful accounts	(24.4)	(21.2)
Accounts receivable, net	$ 946.4	$ 817.0
Short-term	$ 891.8	$ 770.9
Long-term [1]	$ 54.6	$ 46.1
Notes receivable	$ 65.0	$ 40.9
Short-term [2]	$ 5.8	$ 10.0
Long-term [1]	$ 59.2	$ 30.9

[1] Included in other assets on the Company's Consolidated Balance Sheets.

[2] Included in prepaid expenses and other current assets on the Company's Consolidated Balance Sheets.

A financing receivable represents a financing arrangement with a contractual right to receive money, on demand or on fixed or determinable dates, and that is recognized as an asset on the Company’s Consolidated Balance Sheets. The Company’s financing receivables consist of accounts receivable with contractual maturities of more than one year and notes receivable. A small portion of the Company's financing accounts receivables are included in short-term accounts receivable.

Allowance for doubtful accounts was entirely related to the short-term accounts receivable for both the fiscal years ended September 30, 2016 and October 2, 2015.

See Note 16, "VPT Loans" for more information on the Company's long-term notes receivable balances.

5. GOODWILL AND INTANGIBLE ASSETS

The following table reflects the activity of goodwill by reportable operating segment:

(In millions)	Oncology Systems	Imaging Components	Other	Total
Balance at September 26, 2014	$ 148.3	$ 36.0	$56.3	$240.6
Business combinations	10.5	38.7	—	49.2
Foreign currency translation adjustments	—	—	(6.3)	(6.3)
Balance at October 2, 2015	158.8	74.7	50.0	283.5
Business combinations	11.4	—	—	11.4
Foreign currency translation adjustments	—	—	(0.2)	(0.2)
Balance at September 30, 2016	$ 170.2	$ 74.7	$49.8	$294.7

The following table reflects the gross carrying amount and accumulated amortization of the Company’s finite-lived intangible assets:

(In millions)	September 30, 2016	October 2, 2015
Finite-lived intangible assets:		
Technologies and patents	$ 122.0	$ 98.7
Customer contracts and supplier relationship	41.7	20.1
Other	12.7	8.3
Accumulated amortization	(80.5)	(65.1)
Net carrying amount	$ 95.9	$ 62.0

As of September 30, 2016 and October 2, 2015, the Company also had $8.8 million and $10.6 million, respectively, of IPR&D assets acquired as part of the Company's business acquisitions. See Note 15, "Business Combinations" for additional information. Amortization expense for intangible assets was $15.6 million, $8.4 million and $4.8 million for fiscal years 2016, 2015 and 2014, respectively. The Company estimates that the amortization expense for intangible assets for fiscal years 2017 through 2021, and thereafter, will be as follows (in millions): $20.1, $18.3, $14.1, $12.7, $9.5, and $21.2, respectively.

6. RELATED PARTY TRANSACTIONS

VMS has a 40% ownership interest in dpiX Holding, a two-member consortium which has a 100% ownership interest in dpiX LLC ("dpiX"), a supplier of amorphous silicon based thin film transistor arrays ("flat panels") for the Company's Imaging Components' digital image detectors and for its Oncology Systems' On-Board Imager® and PortalVision™ imaging products. In accordance with the dpiX Holding agreement, net profits or losses are allocated to the members, in accordance with their ownership interests.

The equity investment in dpiX Holding is accounted for under the equity method of accounting. When VMS recognizes its share of net profits or losses of dpiX Holding, profits or losses in inventory purchased from dpiX are eliminated until realized by VMS. VMS recorded a loss on the equity investment in dpiX Holding of $1.5 million in fiscal year 2016, income on the equity investment in dpiX Holding of $0.1 million in fiscal year 2015, and a loss on the equity investment in dpiX Holding of $0.8 million in fiscal year 2014. Income and loss on the equity investment in dpiX Holding is included in selling, general and administrative expenses in the Consolidated Statements of Earnings. The carrying value of the equity investment in dpiX Holding, which was included in other assets on the Consolidated Balance Sheets, was $47.2 million at September 30, 2016 and $47.3 million at October 2, 2015.

During fiscal years 2016, 2015 and 2014, the Company purchased glass transistor arrays from dpiX totaling $23.4 million, $21.3 million and $20.9 million, respectively. These purchases of glass transistor arrays are included as a component of inventories on the Consolidated Balance Sheets or cost of revenues – product in the Consolidated Statements of Earnings for these fiscal years.

In October 2013, VMS entered into an amended agreement with dpiX and other parties that, among other things, provides the Company with the right to 50% of dpiX's total manufacturing capacity produced after January 1, 2014. The amended agreement requires the Company to pay for 50% of the fixed costs (as defined in the amended agreement), as determined at the beginning of each calendar year. As of September 30, 2016, the Company estimated it has fixed cost commitments of $4.5 million related to this amended agreement through December 31, 2016. The fixed cost commitment for future periods will be determined and approved by the dpiX board of directors at the beginning of each calendar year. The amended agreement will continue unless the ownership structure of dpiX changes (as defined in the amended agreement).

The Company has determined that dpiX is a variable interest entity because at-risk equity holders, as a group, lack the characteristics of a controlling financial interest. Majority votes are required to direct the manufacturing activities, legal operations and other activities that most significantly affect dpiX's economic performance. The Company does not have majority voting rights and no power to direct the activities of dpiX and therefore is not the primary beneficiary of dpiX.

7. BORROWINGS

The following table summarizes the Company's short-term and long-term debt:

(In millions, except for percentages)	September 30, 2016 Amount	Weighted-Average Interest Rate	October 2, 2015 Amount	Weighted-Average Interest Rate
Short-term debt:				
Current portion of 2013 Term Loan Facility	$50.0	1.65 %	$50.0	1.32 %
2013 Revolving Credit Facility	300.0	1.91 %	90.0	1.57 %
Sumitomo Credit Facility	29.6	0.53 %	18.4	0.63 %
Total short-term debt	$379.6		$158.4	
Long-term debt:				
2013 Term Loan Facility	$287.5	1.65 %	$337.5	1.32 %
Total long-term debt	$287.5		$337.5	

On August 27, 2013, VMS entered into an agreement, as amended to date, ("Credit Agreement") with certain lenders and Bank of America, N.A. (“BofA”) as administrative agent ("Debt Lenders"). The Credit Agreement provides for (i) a five-year term loan facility in an aggregate principal amount of up to $500 million (the “2013 Term Loan Facility”) and (ii) a five-year revolving credit facility in an aggregate principal amount of up to $500 million (the “2013 Revolving Credit Facility” and, collectively with the 2013 Term Loan Facility, the “2013 Credit Facility”). The 2013 Revolving Credit Facility also includes a $50 million sub-facility for the issuance of letters of credit and permits swing line loans of up to $25 million. In November 2015, the Company amended its Credit Agreement to increase the aggregate commitments under its revolving credit facility from $300 million to $500 million, reduce commitment fees and interest rate margins applicable to borrowings and increase the maximum consolidated leverage ratio that the Company must maintain. The aggregate commitments under the 2013 Term Loan Facility may be increased by up to $100 million, and the aggregate commitments under the 2013 Revolving Credit Facility, may be increased by up to $100 million, subject to certain conditions being met, including lender approval. In September 2016, the Company amended its Credit Agreement to obtain the Debt Lenders' consent to the separation of its Imaging Components business, waive any potential default that may arise as a result of the separation, and increase the maximum consolidated leverage ratio that the Company must maintain. The Credit Agreement will expire in August 2018. The proceeds of the 2013 Credit Facility may be used for working capital, capital expenditures, Company share repurchases, acquisitions and other corporate purposes.

Borrowings under the 2013 Term Loan Facility accrue interest either (i) based on a Eurodollar Rate, as defined in the Credit Agreement (the “Eurodollar Rate”), plus a margin of 0.875% to 1.125% based on a leverage ratio involving funded indebtedness and EBITDA (earnings before interest, tax and depreciation and amortization), or (ii) based upon a base rate of (a) the federal funds rate plus 0.50%, (b) BofA’s announced prime rate, or (c) the Eurodollar Rate plus 1.00%, whichever is highest, plus a margin of up to 0.125% based on the same leverage ratio, depending upon instructions from the Company.

Borrowings under the 2013 Revolving Credit Facility accrue interest either (i) based on the Eurodollar Rate plus a margin of 1.125% to 1.375% based on a leverage ratio involving funded indebtedness and EBITDA, or (ii) based upon a base rate of (a) the federal funds rate plus 0.50%, (b) BofA’s announced prime rate, or (c) the Eurodollar Rate plus 1.00%, whichever is highest, plus a margin of 0.125% to 0.375% based on the same leverage ratio, depending upon instructions from the Company. Borrowings under the 2013 Revolving Credit Facility have a maturity of approximately 30 days if based on the Eurodollar Rate and the same maturity as the 2013 Term Loan Facility if based on the base rate.

The Company must pay a commitment fee on the unused portion of the 2013 Revolving Credit Facility at a rate from 0.125% to 0.20% based on a leverage ratio. The Company may prepay, reduce or terminate the commitments without penalty. Swing line loans under the 2013 Credit Facility will bear interest at the base rate plus the then applicable margin for base rate loans. The Company paid commitment fees of $0.3 million, $0.6 million, and $0.6 million in fiscal years 2016, 2015 and 2014, respectively, related to its borrowings.

The Credit Agreement provides that certain material domestic subsidiaries guarantee the 2013 Credit Facility, subject to certain limitations on the amount guaranteed. In March 2016, the Credit Agreement was amended to provide for the release of an

existing subsidiary stock pledge securing the 2013 Credit Facility and to provide that the Company will no longer be required to pledge the stock of any of its subsidiaries.

The Credit Agreement contains provisions that limit the Company's ability to, among other things, incur future indebtedness, contingent obligations or liens, guarantee indebtedness, make certain investments and capital expenditures, sell stock or assets and pay dividends, and consummate certain mergers or acquisitions.

The Credit Agreement contains affirmative and negative covenants applicable to the Company and its subsidiaries that are typical for credit facilities of this type, and that are subject to materiality and other qualifications, carve-outs, baskets and exceptions. The Company has also agreed to maintain certain financial covenants including (i) a maximum consolidated leverage ratio, involving funded indebtedness and EBITDA and (ii) a minimum consolidated fixed charge coverage ratio. The Company was in compliance with all covenants under the Credit Agreement for all periods within these consolidated financial statements.

VMS’s Japanese subsidiary (“VMS KK”) has an unsecured uncommitted credit agreement with Sumitomo that enables VMS KK to borrow and have outstanding at any given time a maximum of 3.0 billion Japanese Yen (the “Sumitomo Credit Facility”). In February 2016, the Sumitomo Credit Facility was extended and will expire in February 2017. Borrowings under the Sumitomo Credit Facility accrue interest based on the basic loan rate announced by the Bank of Japan plus a margin of 0.5% per annum.
Interest paid on borrowings was $10.8 million, $7.1 million and $7.0 million for fiscal year 2016, 2015 and 2014, respectively. As of September 30, 2016, future principal payments for long-term debt due in August 2018 for fiscal years 2017 and 2018 are $50.0 million, and $287.5 million, respectively.

8. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

The Company measures all derivatives at fair value on the Consolidated Balance Sheets. The accounting for gains or losses resulting from changes in the fair value of those derivatives depends upon the use of the derivative and whether it qualifies for hedge accounting.
As of September 30, 2016 and October 2, 2015, the Company did not have any outstanding derivatives designated as hedging instruments. As of September 30, 2016 and October 2, 2015, the fair value of the Company's derivatives not designated as hedging instruments were immaterial. See Note 3, "Fair Value" for the valuation of the Company’s derivative instruments. Also, see Note 1, "Summary of Significant Accounting Policies" for the credit risk associated with the Company’s derivative instruments.

Offsetting of Derivatives

The Company presents its derivative assets and derivative liabilities on a gross basis on the Consolidated Balance Sheets. However, under agreements containing provisions on netting with certain counterparties of foreign exchange contracts, subject to applicable requirements, the Company is allowed to net-settle transactions on the same date in the same currency, with a single net amount payable by one party to the other. As of September 30, 2016 and October 2, 2015, there were no potential effects of rights of setoff associated with derivative instruments. The Company is neither required to pledge nor entitled to receive cash collateral related to these derivative transactions.

Cash Flow Hedging Activities

The Company has many transactions denominated in foreign currencies and addresses certain of those financial exposures through a risk management program that includes the use of derivative financial instruments. The Company sells products throughout the world, often in the currency of the customer’s country, and may hedge certain of the larger foreign currency transactions when they are either not denominated in the relevant subsidiary’s functional currency or the U.S. Dollar. These foreign currency sales transactions are hedged using foreign currency forward contracts. The Company may use other derivative instruments in the future. The Company does not enter into foreign currency forward contracts for speculative or trading purposes. Foreign currency forward contracts are entered into several times a quarter and range from one to thirteen months in maturity.

The hedges of foreign currency denominated forecasted revenues are designated and accounted for as cash flow hedges. The designated cash flow hedges de-designate when the anticipated revenues associated with the transactions are recognized and the effective portion in accumulated other comprehensive loss on the Consolidated Balance Sheets is reclassified to revenues in

the Consolidated Statements of Earnings. Subsequent changes in fair value of the derivative instrument are recorded in selling, general and administrative expenses in the Consolidated Statements of Earnings to offset changes in fair value of the resulting non-functional currency receivables. For derivative instruments that are designated and qualified as cash flow hedges, the Company formally documents for each derivative instrument at the hedge's inception, the relationship between the hedging instrument (foreign currency forward contract) and hedged item (forecasted foreign currency revenues), the nature of the risk being hedged and its risk management objective and strategy for undertaking the hedge. The Company records the effective portion of the gain or loss on the derivative instruments that are designated and qualified as cash flow hedges in accumulated other comprehensive loss on the Consolidated Balance Sheets and reclassifies these amounts into revenues in the Consolidated Statements of Earnings in the period in which the hedged transaction is recognized in earnings. The Company assesses hedge effectiveness both at the onset of the hedge and on an ongoing basis using regression analysis. The Company measures hedge ineffectiveness by comparing the cumulative change in the fair value of the effective component of the hedge contract with the cumulative change in the fair value of the hedged item. The Company recognizes any over performance of the derivative as ineffectiveness in revenues, and time value amounts excluded from the assessment of effectiveness in cost of revenues in the Consolidated Statements of Earnings. During fiscal years 2016, 2015 and 2014, the Company did not discontinue any cash flow hedge. At the inception of the hedge relationship and quarterly thereafter, the Company assesses whether the likelihood of meeting the forecasted cash flow is highly probable. As of September 30, 2016, the Company did not have any foreign currency forward contracts designated as cash flow hedges.

The following table presents the amounts, before tax, recognized in accumulated other comprehensive loss on the Consolidated Balance Sheets and in the Consolidated Statements of Earnings that are related to the effective portion of the foreign currency forward contracts designated as cash flow hedges:

	Gain (Loss) Recognized in Other Comprehensive Income (Effective Portion)			Location of Gain (Loss) Reclassified from Accumulated Other Comprehensive Income into Net Earnings (Effective Portion)	Gain (Loss) Reclassified from Accumulated Other Comprehensive Income into Net Earnings (Effective Portion)		
	Fiscal Years				Fiscal Years		
(In millions)	2016	2015	2014		2016	2015	2014
Foreign currency forward contracts	$(1.0)	$2.2	$3.9	Revenues	$(1.0)	$3.8	$1.3

The portion of cash flow hedges gain or loss excluded from the assessment of effectiveness and the ineffective portion of the cash flow hedges were not material in fiscal years 2016, 2015 and 2014.

Balance Sheet Hedging Activities

The Company also hedges balance sheet exposures from its various subsidiaries and business units where the U.S. Dollar is the functional currency. The Company enters into foreign currency forward contracts to minimize the short-term impact of foreign currency fluctuations on monetary assets and liabilities denominated in currencies other than the U.S. Dollar functional currency. The foreign currency forward contracts are short term in nature, typically with a maturity of approximately one month, and are based on the net forecasted balance sheet exposure. For derivative instruments not designated as hedging instruments, changes in their fair values are recognized in selling, general and administrative expenses in the Consolidated Statements of Earnings. Changes in the values of these hedging instruments are offset by changes in the values of foreign-currency-denominated assets and liabilities. Variations from the forecasted foreign currency assets or liabilities, coupled with a significant currency rate movement, may result in a material gain or loss if the hedges are not effectively offsetting the change in value of the foreign currency asset or liability. Other than foreign exchange hedging activities, the Company has no other free-standing or embedded derivative instruments.

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The Company had the following outstanding foreign currency forward contracts:

	September 30, 2016	
(In millions)	Notional Value Sold	Notional Value Purchased
Australian Dollar	$21.2	$ —
Brazilian Real	7.1	—
Canadian Dollar	—	3.0
Euro	159.2	1.0
Indian Rupee	9.1	—
Japanese yen	69.3	—
Swedish Krona	4.5	—
Swiss Franc	—	94.0
Totals	$270.4	$ 98.0

The following table presents the gains (losses) recognized in the Company's Consolidated Statements of Earnings related to the foreign currency forward contracts that are not designated as hedging instruments.

Location of Gain (Loss) Recognized in Income on Derivative	Amount of Gain (Loss) Recognized in Net Earnings on Derivative		
	Fiscal Years		
(In millions)	2016	2015	2014
Selling, general and administrative expenses	$(5.3)	$27.6	$13.7

The gains (losses) on these derivative instruments were significantly offset by the gains (losses) resulting from the re-measurement of monetary assets and liabilities denominated in currencies other than the U.S. Dollar functional currency.

Contingent Features

Certain of the Company’s derivative instruments are subject to master agreements which contain provisions that require the Company, in the event of a default, to settle the outstanding contracts in net liability positions by making settlement payments in cash or by setting off amounts owed to the counterparty against any credit support or collateral held by the counterparty. As of September 30, 2016 and October 2, 2015, the Company did not have any outstanding derivative instruments with credit-risk-related contingent features that were in a net liability position.

9. COMMITMENTS AND CONTINGENCIES

Indemnification Agreements

In conjunction with the sale of the Company’s products in the ordinary course of business, the Company provides standard indemnification of business partners and customers for losses suffered or incurred for property damages, death and injury and for patent, copyright or any other intellectual property infringement claims by any third parties with respect to its products. The terms of these indemnification arrangements are generally perpetual. Except for losses related to property damages, the maximum potential amount of future payments the Company could be required to make under these arrangements is unlimited. As of September 30, 2016, the Company had not incurred any significant costs since the Spin-offs to defend lawsuits or settle claims related to these indemnification arrangements. As a result, the Company believes the estimated fair value of these arrangements is minimal.

VMS has entered into indemnification agreements with its directors and officers and certain of its employees that serve as officers or directors of its foreign subsidiaries that may require VMS to indemnify its directors and officers and those certain employees against liabilities that may arise by reason of their status or service as directors or officers, and to advance their expenses incurred as a result of any legal proceeding against them as to which they could be indemnified.

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Product Warranty

The following table reflects the changes in the Company’s accrued product warranty:

	Fiscal Years	
(In millions)	2016	2015
Accrued product warranty, at beginning of period	$45.9	$49.3
Charged to cost of revenues	59.4	50.8
Actual product warranty expenditures	(50.5)	(54.2)
Accrued product warranty, at end of period	$54.8	$45.9

The long term portion of accrued product warranty costs were $3.7 million and $2.0 million at September 30, 2016 and October 2, 2015, respectively and were included in other long-term liabilities on the Consolidated Balance Sheets.

Lease Commitments

At September 30, 2016, the Company was committed to minimum rentals under non-cancelable operating leases (including rent escalation clauses) for fiscal years 2017 through 2021 and thereafter, as follows (in millions): $27.5, $20.8, $15.3, $12.3, $11.0 and $19.4, respectively. Rental expenses were $28.1 million, $28.8 million and $28.7 million for fiscal years 2016, 2015 and 2014, respectively.

Other Commitments

See Note 6, "Related Party Transactions" for additional information about the Company's commitments to dpiX.

See Note 11, "Stockholders' Equity and Noncontrolling Interests" for additional information about the Company's commitment to the noncontrolling shareholders of MeVis Medical Solutions AG (“MeVis”).

See Note 16, "VPT Loans" for additional information about the Company's commitments for funding development and construction of various proton therapy centers.

Contingencies

Environmental Remediation Liabilities

The Company’s operations and facilities, past and present, are subject to environmental laws, including laws that regulate the handling, storage, transport and disposal of hazardous substances. Certain of those laws impose cleanup liabilities under certain circumstances. In connection with those laws and certain of the Company’s past and present operations and facilities, the Company oversees various environmental cleanup projects and also reimburses certain third parties for cleanup activities. Those include facilities sold as part of the Company’s electron devices business in 1995 and thin film systems business in 1997. In addition, the U.S. Environmental Protection Agency (“EPA”) or third parties have named the Company as a potentially responsible party under the amended Comprehensive Environmental Response Compensation and Liability Act of 1980 (“CERCLA”), at sites to which the Company or the facilities of the sold businesses were alleged to have shipped waste for recycling or disposal (the “CERCLA sites”). In connection with the CERCLA sites, the Company to date has been required to pay only a small portion of the total amount as its contributions to cleanup efforts. Under the agreement that governs the Spin-offs, VI and VSEA are each obligated to indemnify the Company for one-third of the environmental cleanup costs associated with corporate, discontinued or sold operations prior to the Spin-offs (after adjusting for any insurance proceeds or tax benefits received by the Company), as well as fully indemnify the Company for other liabilities arising from the operations of the business transferred to it as part of the Spin-offs.

The Company spent $1.1 million, $1.3 million, and $1.2 million (net of amounts borne by VI and VSEA) during fiscal years 2016, 2015 and 2014, respectively, on environmental cleanup costs, third-party claim costs, project management costs and legal costs.

Inherent uncertainties make it difficult to estimate the likelihood of the cost of future cleanup, third-party claims, project management and legal services for the CERCLA sites and one of the Company’s past facilities. Nonetheless, as of September 30, 2016, the Company estimated that, net of VI’s and VSEA’s indemnification obligations, future costs associated with the CERCLA sites and this facility would range in total from $1.3 million to $9.9 million. The time frames over which these cleanup project costs are estimated vary, ranging from one year up to thirty years as of September 30, 2016. Management

believes that no amount in that range is more probable of being incurred than any other amount and therefore had accrued $1.3 million for these cleanup projects as of September 30, 2016. The accrued amount has not been discounted to present value due to the uncertainties that make it difficult to develop a single best estimate.

The Company believes it has gained sufficient knowledge to better estimate the scope and cost of monitoring, cleanup and management activities for its other past and present facilities. This, in part, is based on agreements with other parties and also cleanup plans approved by or completed in accordance with the requirements of the governmental agencies having jurisdiction. As of September 30, 2016, the Company estimated that the Company's future exposure, net of VI's and VSEA's indemnification obligations, for the costs at these facilities, and reimbursements of third-party's claims for these facilities, ranged in total from $5.3 million to $25.5 million. The time frames over which these costs are estimated to be incurred vary, ranging from one to thirty years as of September 30, 2016. As to each of these facilities, management determined that a particular amount within the range of estimated costs was a better estimate than any other amount within the range, and that the amount and timing of these future costs were reliably determinable. The best estimate within that range was $8.1 million at September 30, 2016. Accordingly, the Company had accrued $6.8 million for these costs as of September 30, 2016, which represented the best estimate discounted at 4%, net of inflation. This accrual is in addition to the $1.3 million described in the preceding paragraph.

The table that follows presents information about the Company's liabilities for future environmental costs at September 30, 2016, based on estimates as of that date.

(In millions)	Recurring Costs	Non-Recurring Costs	Total Anticipated Future Costs
Fiscal Years:			
2017	$ 0.4	$ 1.2	$ 1.6
2018	0.5	0.5	1.0
2019	0.4	0.6	1.0
2020	0.4	0.3	0.7
2021	0.5	0.7	1.2
Thereafter	2.8	1.0	3.8
Total costs	$ 5.0	$ 4.3	$ 9.3
Less imputed interest			1.2
Reserve amount			$ 8.1

Recurring costs include expenses for such tasks as the ongoing operation, maintenance and monitoring of cleanup. Non-recurring costs include expenses for such tasks as soil excavation and treatment, installation of injection and monitoring wells, other costs for soil and groundwater treatment by injection, construction of ground and surface water treatment systems, soil and groundwater investigation, governmental agency costs required to be reimbursed by the Company, removal and closure of treatment systems and monitoring wells, and the defense and settlement of pending and anticipated third-party claims.

These amounts are only estimates of anticipated future costs. The amounts the Company will actually spend may be greater or less than these estimates, even as the Company believes the degree of uncertainty will narrow as cleanup activities progress. While the Company believes its reserve is adequate, as the scope of the Company's obligations becomes more clearly defined, the Company may modify the reserve, and charge or credit future earnings accordingly. Nevertheless, based on information currently known to management, and assuming VI and VSEA satisfy their indemnification obligations, management believes the costs of these environmental related matters are not reasonably likely to have a material adverse effect on the consolidated financial statements of the Company in any one fiscal year.

The Company evaluates its liability for investigation and cleanup costs in light of the obligations and apparent financial strength of potentially responsible parties and insurance companies with respect to which the Company believes it has rights to indemnity or reimbursement. The Company has asserted claims for recovery of environmental

investigation and cleanup costs already incurred, and to be incurred in the future against various insurance companies and other third parties. The Company receives certain cash payments in the form of settlements and judgments from defendants, insurers and other third parties from time to time. The Company has also reached an agreement with an insurance company under which that insurer has agreed to pay a portion of the Company's past and future environmental related expenditures. Receivables, net of VI's and VSEA's portion, from that insurer amounted to $2.0 million at September 30, 2016 and $2.1 million at October 2, 2015, with the respective current portion included in prepaid expenses, other current assets and the respective noncurrent portion included in other assets and the payable portion to that insurer is included in other long-term liabilities on the Consolidated Balance Sheets.

The Company believes that this receivable is recoverable because it is based on a binding, written settlement agreement with what appears to be a financially viable insurance company, and the insurance company has paid the Company's claims in the past.

The availability of the indemnities of VI and VSEA will depend upon the future financial strength of VI and VSEA. Given the long-term nature of some of the liabilities, VI and VSEA may be unable to fund the indemnities in the future. It is also possible that a court would disregard this contractual allocation among the parties and require the Company to assume responsibility for obligations allocated to another party, particularly if the other party were to refuse or was unable to pay any of its allocated share. The agreement governing the Spin-offs generally provides that if a court prohibits a company from satisfying its shared indemnification obligations, the indemnification obligations will be shared equally by the two other companies.

Other Matters

From time to time, the Company is a party to or otherwise involved in legal proceedings, claims and government inspections or investigations and other legal matters, both inside and outside the United States, arising in the ordinary course of its business or otherwise. The Company accrues amounts, to the extent they can be reasonably estimated, that it believes are adequate to address any liabilities related to legal proceedings and other loss contingencies that the Company believes will result in a probable loss (including, among other things, probable settlement value). A loss or a range of loss is disclosed when it is reasonably possible that a material loss will be incurred and can be estimated or when it is reasonably possible that the amount of a loss, when material, will exceed the recorded provision.

In September 2015, Elekta Ltd. and William Beaumont Hospital served the Company with a complaint alleging infringement of patents related to certain aspects of cone beam imaging in conjunction with radiotherapy. During September 2015 and October 2015, the Company filed several complaints in the United States and foreign courts and the U.S. International Trade Commission against Elekta AB and its subsidiaries alleging infringement of various patents relating to certain aspects of cone beam imaging, cone-beam imaging gantries, volumetric modulated arc therapy ("VMAT"), and combined magnetic resonance imaging linear accelerator systems. In February 2016, Elekta Ltd. filed several complaints in the U.S. and foreign courts alleging infringement of certain patents related to linear accelerator control systems and treatment planning. In October 2016, Elekta Ltd. filed a complaint in the United Kingdom alleging infringement of a further patent related to linear accelerator control systems and treatment planning, and added a patent relating to the same subject matter to its existing U.S. suit filed in February 2016. These legal proceedings are ongoing and, although there have been interim court rulings in certain jurisdictions, there have been no definite outcomes to date. The Company is unable to predict the outcomes of these matters and therefore, no amounts have been accrued as of September 30, 2016.

In June 2015, a foreign subsidiary of the Company was charged by the Department for Investigation and Penal Action of Lisbon with alleged improper activities relating to three tenders of medical equipment in Portugal during the period of 2003 to 2009. The Company previously undertook an internal investigation of this matter and voluntarily disclosed the results of this investigation to the U.S. Department of Justice and the U.S. Securities and Exchange Commission. After the Company requested a judicial review available under Portuguese criminal procedure processes as to whether or not such charges are proper under Portuguese law, the matter was resolved and definitively dismissed, subject to a 30-day probation period which began on October 21, 2016, with no adverse findings or charges against the Company.

In April 2007, a patent infringement lawsuit was initiated by the University of Pittsburgh of the Commonwealth System of Higher Education (the "University of Pittsburgh") regarding the Company's Real-time Position Management™ ("RPM") technology. In January 2014, the Company entered into a settlement agreement with the University of Pittsburgh and in the third quarter of fiscal year 2014 paid $35.6 million in full settlement of the lawsuit. Prior to the beginning of the second quarter of fiscal year 2014, the Company had accrued in aggregate approximately $5.0 million for the low end of the range of the probable settlement value for this matter. In the second quarter of fiscal year 2014, the Company accrued an additional $25.1 million of the $35.6 million for all damages and interest related to the case and in the third quarter of fiscal year 2014 recorded the remaining amount of approximately $5.5 million for future royalties as prepaid royalties. The amount of prepaid royalties is being amortized beginning with the third quarter of fiscal year 2014, over the remaining life of the patent of approximately two and a half years.

In addition to the above, the Company is involved in other legal matters. However, such matters are subject to many uncertainties and outcomes are not predictable with assurance. The Company is unable to estimate a range of reasonably possible losses with respect to such matters. There can be no assurances as to whether the Company will become subject to significant additional claims and liabilities with respect to ongoing or future proceedings. If actual liabilities significantly

exceed the estimates made, the Company’s consolidated financial position, results of operations or cash flows could be materially adversely affected. Legal expenses relating to legal matters are expensed as incurred.

Restructuring Charges

As part of the Company's plan to enhance operational performance through productivity initiatives, the Company implemented a workforce reduction, primarily in its Oncology Systems and Imaging Components segments, in the first quarter of fiscal year 2016. The Company incurred $5.3 million in restructuring charges during fiscal year 2016, in connection with the restructuring program, of which $4.0 million was paid in fiscal year 2016. The Company expects to substantially complete this restructuring program by the end of fiscal year 2017, and any remaining restructuring charges relating to this program are not expected to be material.

In fiscal year 2015, the Company incurred $13.3 million in restructuring charges and a significant portion of these charges was paid in cash in fiscal year 2015 and was substantially completed in fiscal year 2016. There were no restructuring charges incurred in fiscal year 2014. Restructuring charges are included in selling, general and administrative expenses in the Consolidated Statements of Earnings.

10. RETIREMENT PLANS

The Company sponsors the Varian Medical Systems, Inc. Retirement Plan (the “Retirement Plan”) — a defined contribution plan that is available to substantially all of its employees in the United States. Under Section 401(k) of the Internal Revenue Code, the Retirement Plan allows for tax-deferred salary contributions by eligible employees. Participants can contribute from 1% to 25% of their eligible base compensation to the Retirement Plan on a pre-tax or Roth basis (plus up to an additional 15% on an after-tax basis if they have more than one year of service with the Company) and all or a portion of their bonuses under the Employee Incentive Plan. However, participant contributions are limited to a maximum annual amount as determined periodically by the Internal Revenue Service. The Company matches eligible participant contributions dollar for dollar for the first 6% of eligible base compensation or bonus (for those employees with one or more years of service with the Company). All matching contributions vest immediately.

The Company also has a defined contribution plan that is available to regular full-time employees in the United Kingdom (the “U.K. Savings Plan”). Participants can contribute from 4% to 100% of their eligible base compensation to the U.K. Savings Plan subject to a maximum annual amount determined by certain tax rules. The Company matches participant contributions up to 6% of participants’ eligible base compensation, based on the participants’ level of contributions under this U.K. Savings Plan. All matching contributions vest immediately.

The Company sponsors seven defined benefit pension plans for regular full time employees in Germany, Japan, Switzerland, the Philippines and the United Kingdom. The Company also sponsors a post-retirement benefit plan that provides healthcare benefits to certain eligible retirees in the United States.

The Company recognizes the funded status of its defined benefit pension and post-retirement benefit plans on its Consolidated Balance Sheets. Each overfunded plan is recognized as an asset, and each underfunded plan is recognized as a liability. Unrecognized prior service costs or credits and net actuarial gains or losses, as well as subsequent changes in the funded status are recognized as a component of accumulated other comprehensive loss within Stockholders’ equity. Current year disclosures include the Company's defined benefit pension plans from acquisitions completed in fiscal year 2015, including one in Germany and one in the Philippines, which were not presented in the previous year as they were not material.

Total retirement, post-retirement benefit plan and defined benefit plan expense for all retirement plans amounted to $33.3 million, $32.1 million and $28.6 million for fiscal years 2016, 2015 and 2014, respectively. The Company's post-retirement benefit plan is not presented in any of the following information as it is not material.

Obligations and Funded Status

The following table presents the funded status of the defined benefit pension plans:

(In millions)	September 30, 2016	October 2, 2015
Change in benefit obligation:		
Benefit obligation - beginning of fiscal year	$ 210.3	$207.6
Service cost	6.1	5.7
Interest cost	4.1	4.4
Plan participants' contributions	8.8	9.9
Plan amendments	(1.2)	(1.1)
Plan settlements	(4.0)	(4.0)
Plan combinations	0.7	—
Actuarial loss	31.8	3.7
Foreign currency changes	(8.9)	(8.9)
Benefit and expense payments	(4.6)	(7.0)
Benefit obligation - end of fiscal year	$ 243.1	$210.3
Change in plan assets:		
Plan assets - beginning of fiscal year	$ 189.9	$188.6
Employer contributions	8.1	6.9
Actual return on plan assets	13.0	4.1
Plan participants' contributions	8.8	9.9
Plan settlements	(4.0)	(4.0)
Foreign currency changes	(8.7)	(8.6)
Plan combinations	0.4	—
Benefit and expense payments	(4.6)	(7.0)
Plan assets - end of fiscal year	$ 202.9	$189.9
Funded status	$ (40.2)	$(20.4)
Amounts recognized within the consolidated balance sheet:		
Other assets	$ —	$4.3
Other long-term liabilities	(40.2)	(24.7)
Net amount recognized	$ (40.2)	$(20.4)

The following table presents the amounts recognized in accumulated other comprehensive loss (before tax) for the defined benefit pension plans:

(In millions)	September 30, 2016	October 2, 2015
Prior service credit	$ 1.9	$0.7
Net loss	(80.7)	(58.9)
Accumulated other comprehensive loss	$ (78.8)	$(58.2)

The following table presents the projected benefit obligation, accumulated benefit obligation and fair value of plan assets for those defined benefit pension plans where accumulated benefit obligation exceeded the fair value of plan assets:

(In millions)	September 30, 2016	October 2, 2015
Projected benefit obligation	$ 17.8	$ 15.6
Accumulated benefit obligation	$ 16.8	$ 14.2

Fair value of plan assets	$ 13.0	$ 13.2

The accumulated benefit obligation for all defined benefit pension plans was $193.4 million and $175.6 million at September 30, 2016 and October 2, 2015, respectively.

Components of Net Periodic Benefit Cost and Other Amounts Recognized in Other Comprehensive Loss
The following table shows the components of the Company's net periodic benefit costs and the other amounts recognized in other comprehensive loss, before tax, related to the Company's defined benefit pension plans:

	Fiscal Years		
(In millions)	2016	2015	2014
Net Periodic Benefit Costs:			
Service cost	$ 6.1	$ 5.7	$ 4.1
Interest cost	4.1	4.4	6.1
Loss due to settlement	1.0	1.1	1.8
Expected return on assets	(6.8)	(7.1)	(7.8)
Amortization of prior service cost	(0.1)	0.1	0.2
Recognized actuarial loss	2.9	2.5	2.1
Net periodic benefit cost	7.2	6.7	6.5
Other Amounts Recognized in Other Comprehensive Loss:			
New prior service credit	(1.2)	(1.1)	—
Net loss arising during the year	25.6	6.7	10.3
Amortization of prior service credit (cost)	0.1	(0.1)	(0.2)
Amortization, settlement and curtailment of net actuarial loss	(3.9)	(3.6)	(3.9)
Total recognized in other comprehensive loss	20.6	1.9	6.2
Total recognized in net periodic benefit cost and other comprehensive loss	$ 27.8	$ 8.6	$ 12.7

The amounts in accumulated other comprehensive loss that are expected to be recognized as components of net periodic benefit cost during fiscal year 2017 related to the Company's defined benefit pension plans are as follows:

(In millions)	Total
Prior service credit	$0.2
Net loss	(4.4)
Total	$(4.2)

Assumptions

The assumptions used to determine net periodic benefit cost and to compute the expected long-term return on assets for the Company's defined benefit pension plans were as follows:

	Fiscal Years		
Net Periodic Benefit Cost	2016	2015	2014
Discount rate	2.09%	2.58%	3.11%
Rate of compensation increase	2.42%	2.45%	2.51%
Expected long-term return on assets	3.69%	3.90%	4.21%

The assumptions used to measure the benefit obligation for the Company's defined benefit pension plans were as follows:

Benefit Obligation	September 30, 2016	October 2, 2015
Discount rate	1.03 %	2.09 %
Rate of compensation increase	2.33 %	2.50 %

The benefit obligation of defined benefit pension plans was measured as of September 30, 2016. The discount rate was adjusted as of September 30, 2016 to a range of 0.30% to 4.75%, primarily based on the current effective yield of long-term corporate

bonds that are of high quality with satisfactory liquidity and credit rating with durations corresponding to the expected duration of the benefit obligations. Additionally, the rate of projected compensation increase was adjusted as of September 30, 2016 to a range of 1.75% to 5.00% reflecting expected inflation levels and the Company's future outlook.

During the fourth quarter of fiscal year 2016, the Company reviewed the expected long-term rate of return on defined benefit pension plan assets. This review consisted of forward-looking projections for a risk-free rate of return, inflation rate and implied equity risk premiums for particular asset classes. The results of this review were applied to the target asset allocation in accordance with the Company's planned investment strategies, which are implemented by outside investment managers. The expected long-term rate of return on plan assets was determined based on the weighted average of projected returns on each asset class.

Plan Assets

For the defined benefit pension plans, the investment objectives of the Company are to generate returns that will enable the defined benefit pension plans to meet their future obligations. The precise amount of these obligations depends on future events, including the life expectancies of the pension plans' members and the level of salary increases. The obligations are estimated using actuarial assumptions, based on the current economic environment. The investment strategy depends on the country in which the defined benefit pension plan applies. The investment objectives of some defined benefit pension plans are more conservative than others. In general, the investment strategy of the defined benefit pension plans is to balance the requirement to generate return using higher-returning assets such as equity securities, with the need to control risk with less volatile assets, such as fixed-income securities. Risks include, among others, the likelihood of the defined benefit pension plans becoming underfunded, thereby increasing their dependence on contributions from the Company. Within each asset class, investment managers give consideration to balancing the portfolio among industry sectors, geographies, interest rate sensitivity, dependence on economic growth, currency and other factors that affect investment returns. The target allocation as of the end of fiscal year 2016 was 25% equities, 64% debt and fixed income assets, 3% real estate, and 8% other.

The following table presents the Company's defined benefit pension plans' major asset categories, their associated fair values, as well as the actual allocation of equity, debt and fixed income, real estate and all other types of investments:

(In millions)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
As of September 30, 2016:				
Investment funds:				
Mutual funds - equities	$ —	$ 52.3	$ —	$52.3
Mutual funds - debt	—	27.2	—	27.2
Mutual funds - real estate	—	4.7	—	4.7
Other	—	2.9	—	2.9
Assets held by insurance company:				
Insurance contracts	—	115.5	—	115.5
Cash and cash equivalents	0.3	—	—	0.3
Total	$ 0.3	$ 202.6	$ —	$202.9
As of October 2, 2015:				
Investment funds:				
Mutual funds - equities	$ —	$ 42.7	$ —	$42.7
Mutual funds - debt	—	35.5	—	35.5
Mutual funds - real estate	—	4.4	—	4.4
Other	—	3.4	—	3.4
Assets held by insurance company:				
Insurance contracts	—	102.9	—	102.9

Cash and cash equivalents	1.0	—	—	1.0
Total	$ 1.0	$ 188.9	$ —	$189.9

Valuation Techniques

Debt securities are valued at the closing price reported on the stock exchange on which the individual securities are traded. Mutual funds held in trust or similar entities include investments in publicly traded mutual funds and are typically valued using the net asset value provided by the administrator of the fund. Insurance contracts are valued by the insurer using the cash surrender value, which is the amount a plan would receive if a contract was terminated. Cash includes deposits and money market accounts, which are valued at their cost plus interest on a daily basis, which approximates fair value. There were no significant changes in valuation techniques during fiscal years 2016 and 2015.

Estimated Contributions and Future Benefit Payments

The Company made contributions of $8.1 million to the defined benefit pension plans during fiscal year 2016, compared to $6.9 million in fiscal year 2015 and $7.2 million in fiscal year 2014. The Company expects total contributions to the defined benefit pension plans for fiscal year 2017 will be approximately $7.2 million.

Estimated future benefit payments to the defined benefit pension plans at September 30, 2016 were as follows:

(In millions)	Total
Fiscal Years:	
2017	$8.6
2018	8.3
2019	8.5
2020	5.3
2021	8.4
2022-2026	40.3
Total	$79.4

11. STOCKHOLDERS’ EQUITY AND NONCONTROLLING INTERESTS

Share Repurchase Program

In November 2015, the VMS Board of Directors authorized the repurchase of 8.0 million shares of VMS common stock through December 31, 2016. Share repurchases under the Company's authorizations may be made in open market purchases, in privately negotiated transactions (including accelerated share repurchase (“ASR”) programs), or under Rule 10b5-1 share repurchase plans, and may be made from time to time in one or more blocks. All shares that were repurchased under the Company's share repurchase programs have been retired.

The Company repurchased shares of VMS common stock under various authorizations during the periods presented as follows:

	Fiscal Years		
(In millions, except per share amounts)	2016	2015	2014
Number of shares	5.7	4.8	7.8
Average repurchase price per share	$81.61	$87.47	$80.52
Total cost	$461.3	$422.0	$624.0

Included in the table above, VMS repurchased common stock under various ASR agreements during the periods presented as follows:

	Fiscal Years		
(In millions, except per share amounts)	2016	2015	2014
Number of shares	1.0	2.3	—
Average repurchase price per share	$83.98	$90.00	$ —
Total cost	$85.8	$203.9	$ —

As of September 30, 2016, approximately 3.8 million shares of VMS common stock remained available for repurchase under the November 2015 authorization. In November 2016, the VMS Board of Directors authorized the repurchase of additional 8.0 million shares of VMS common stock commencing on January 1, 2017.

Accumulated Other Comprehensive Loss

(In millions)	Net Unrealized Gains (Losses) Defined Benefit Pension and Post-Retirement Benefit Plans	Net Unrealized Gains (Losses) Cash Flow Hedging Instruments	Net Unrealized Gains (Losses) Available-for-Sale Securities	Cumulative Translation Adjustment	Accumulated Other Comprehensive Earnings (Loss)
Balance at September 27, 2013	$ (40.1)	$ (0.7)	$ —	$ 0.7	$ (40.1)
Other comprehensive earnings (loss) before reclassifications	(5.4)	3.9	—	(16.2)	(17.7)
Amounts reclassified out of other comprehensive loss	2.3	(1.3)	—	—	1.0
Tax expense	(0.9)	(0.9)	—	—	(1.8)
Balance at September 26, 2014	(44.1)	1.0	—	(15.5)	(58.6)
Other comprehensive earnings (loss) before reclassifications	(4.5)	2.2	(0.2)	(24.8)	(27.3)
Amounts reclassified out of other comprehensive loss	2.1	(3.8)	—	—	(1.7)
Tax benefit	0.4	0.6	0.1	—	1.1
Balance at October 2, 2015	(46.1)	—	(0.1)	(40.3)	(86.5)
Other comprehensive earnings (loss) before reclassifications	(23.4)	(1.0)	(0.4)	2.8	(22.0)
Amounts reclassified out of other comprehensive loss	2.4	1.0	0.6	—	4.0
Tax benefit (expense)	3.8	—	(0.1)	—	3.7
Balance at September 30, 2016	$ (63.3)	$ —	$ —	$ (37.5)	$ (100.8)

The amounts reclassified out of other comprehensive earnings into the Consolidated Statements of Earnings, with line item location, during each period were as follows (in millions):

	Fiscal Years			
Comprehensive Earnings Components	2016	2015	2014	Line Item in Statements of Earnings
Unrealized losses on defined benefit pension and post-retirement benefit plans	$(2.4)	$(2.1)	$(2.3)	Cost of revenues & Operating expenses
Unrealized gains and (losses) on cash flow hedging instruments	(1.0)	3.8	1.3	Revenues
Unrealized loss on available-for-sale investments	(0.6)	—	—	Operating expenses
Total amounts reclassified out of other comprehensive loss	$(4.0)	$1.7	$(1.0)	

Noncontrolling Interests

In April 2015, the Company completed the acquisition of 73.5% of the then outstanding shares of MeVis Medical Solutions AG ("MeVis"), a public company based in Bremen, Germany that provides image processing software and services for cancer screening. See Note 15, "Business Combinations" for additional information.

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In August 2015, the Company, through one of its German subsidiaries, entered into a domination and profit and loss transfer agreement (the "DPLTA") with MeVis. In October 2015, the DPLTA became effective upon its registration at the local court of Bremen, Germany. Under the DPLTA, MeVis subordinates its management to the Company and undertakes to transfer all of its annual profits and losses to the Company. In return, the DPLTA grants the noncontrolling shareholders of MeVis: (1) an annual recurring net compensation of €0.95 per MeVis share starting from January 1, 2015 and (2) a put right for their MeVis shares at €19.77 per MeVis share. Upon effectiveness of the DPLTA, the noncontrolling interests in MeVis became redeemable as a result of the put right and were reclassified to temporary equity. As of September 30, 2016, the redemption value of redeemable noncontrolling interests in MeVis was $10.3 million.

During fiscal year 2016, an immaterial number of MeVis' shares were purchased under the put right. As of September 30, 2016, noncontrolling shareholders together held approximately 0.5 million shares of MeVis, representing 26.4% of the outstanding shares.

Changes in noncontrolling interests and redeemable noncontrolling interests relating to MeVis and other subsidiaries of the Company were as follows:

	Fiscal Years			
	2016		2015	
(In millions)	Noncontrolling Interests	Redeemable Noncontrolling Interests	Noncontrolling Interests	Redeemable Noncontrolling Interests
Balance at beginning of period	$14.7	$ —	$ —	$ —
Net earnings (loss) attributable to noncontrolling interests	(0.1)	0.5	0.5	—
Acquisition of Mevis	—	—	10.2	—
Capital contribution from noncontrolling interest holders	—	—	4.0	—
Reclassification of noncontrolling interests in MeVis to redeemable noncontrolling interests	(10.4)	10.4	—	—
Other	(0.5)	(0.6)	—	—
Balance at end of period	$3.7	$ 10.3	$ 14.7	$ —

12. EMPLOYEE STOCK PLANS

Employee Stock Plans

In February 2005, VMS's stockholders approved the 2005 Omnibus Stock Plan (the "2005 Plan"), which was last amended and restated in February 2012. The 2005 Plan, as amended and restated to date, is referred to as (the "Third Amended 2005 Plan"). The Third Amended 2005 Plan provides for the grant of equity incentive awards, including stock options, restricted stock and restricted stock units, stock appreciation rights, and performance units and performance shares to officers, directors, key employees and consultants. The Third Amended 2005 Plan also provides for the grant of deferred stock units to non-employee directors. The maximum number of shares issuable under the Third Amended 2005 Plan is (a) 25.0 million, plus (b) the number of shares authorized for issuance, but never issued, under previously approved plans, plus (c) the number of shares subject to awards previously granted under previously approved plans that terminate, expire, or lapse, plus (d) amounts granted in substitution of options in connection with certain transactions.

Stock options granted under the Third Amended 2005 Plan have an exercise price equal to the closing market price of a share of VMS common stock on the grant date. Except for directors, stock options granted under the Third Amended 2005 Plan generally are exercisable in the following manner: the first one-third one year from the date of grant, with the remainder vesting monthly during the following two-year period. Stock option grants to directors are immediately exercisable. For grants of non-qualified stock options made on or after November 17, 2005 under the Third Amended 2005 Plan to employees who retire from the Company within one year of the grant date, the number of shares subject to the stock option shall be adjusted proportionally by the time during such one-year period that the employee remained an employee of the Company (based upon a 365 day year). The revised number of shares subject to the stock option would continue to vest in accordance with the original vesting schedule, and the remaining shares would

be cancelled as of the date of retirement. Stock options under the Third Amended 2005 Plan generally have a term of seven years. The Third Amended 2005 Plan prohibits the repricing of stock options and stock appreciation rights without the approval of VMS's stockholders.

Restricted stock awards and restricted stock unit awards generally vest over a period of one to three years from the date of grant. For awards of restricted stock and restricted stock units prior to fiscal year 2010, any unvested awards are generally

forfeited at the time of termination. However, restricted stock units granted in fiscal year 2010 and thereafter that are unvested at death become fully vested and unvested restricted stock units will generally continue to vest in accordance with the original vesting schedule if a retirement eligible employee retires one year or more from grant date. If a retirement eligible employee retires on or after January 1 of the calendar year immediately following the calendar year in which the grant date occurred, the number of restricted stock units shall be adjusted proportionally, subject to local regulations, by the time during such one year period that the employee remained an employee of the Company (based upon a 365 day year). The revised number of restricted stock units would vest in accordance with the original vesting schedule and the remaining restricted stock units would be cancelled as of the date of retirement.

Deferred stock unit awards to non-employee directors vest over a period of not less than one year from the date of grant, unless otherwise provided in the grant agreement as determined by VMS's Board of Directors, and vesting may be pro rata during the vesting period. Each deferred stock unit is deemed to be the equivalent of one share of VMS common stock. Payment of deferred stock units generally will be made in shares of VMS common stock upon the earlier of the third anniversary of the grant date or the director's termination.

In fiscal years 2016, 2015 and 2014, the Company granted performance units to certain employees under the Third Amended 2005 Plan. The number of shares of VMS common stock ultimately issued under the performance units at vesting depend on the Company's business performance and total shareholder return during the performance period, against specified performance targets, both of which are set by the Compensation and Management Development Committee of the Board of Directors at the beginning of the period. The performance units vest at the end of a three-year service period. Performance units granted prior to fiscal year 2015 have one three-year performance period for both the Company's performance and total shareholder return, and performance units granted in fiscal year 2015 have a one-year Company's performance period and a three-year total shareholder return performance period. Performance unit grants made in fiscal year 2016 have three separate one-year Company performance periods and a three-year total shareholder return. Subject to certain exceptions, any unvested performance unit awards are forfeited at the time of termination. Also, similar to the adjustments discussed above for restricted stock unit awards, the number of performance units that ultimately vest is adjusted in the case of retirement.

The fair value of options granted and the option component of the shares purchased under the Employee Stock Purchase Plan (which is described further below) shares were estimated at the date of grant using the Black-Scholes model with the following weighted average assumptions:

	Employee Stock Option Plans			Employee Stock Purchase Plans		
	Fiscal Years			Fiscal Years		
	2016	2015	2014	2016	2015	2014
Expected term (in years)	4.13	4.15	4.13	0.50	0.50	0.50
Risk-free interest rate	1.1 %	1.3 %	1.2 %	0.3 %	0.1 %	0.1 %
Expected volatility	20.1 %	22.1 %	24.6 %	17.6 %	12.7 %	12.8 %
Expected dividend	— %	— %	— %	— %	— %	— %
Weighted average fair value at grant date	$13.71	$18.52	$18.24	$16.09	$15.87	$14.20

The expected term of stock options represents the weighted average period the stock options are expected to remain outstanding. The expected term is based on the observed and expected time to post-vesting exercise and post-vesting cancellations of stock options by Company employees. The Company used a combination of historical and implied volatility of its traded options, or blended volatility, in deriving the expected volatility assumption. The risk-free interest rate assumption is based upon observed interest rates appropriate for the term of VMS's stock options. The dividend yield assumption is based on the Company's history and expectation of no dividend payouts.

As share-based compensation expense recognized in the Consolidated Statements of Earnings is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures, based on historical experience. Forfeitures are estimated at the time of grant and revised, in subsequent periods if actual forfeitures differ from those estimates.

The table below summarizes the effect of recording share-based compensation expense:

	Fiscal Years		
(In millions)	2016	2015	2014
Cost of revenues - Product	$4.2	$4.7	$3.3
Cost of revenues - Service	4.2	4.1	4.7
Research and development	6.7	6.8	6.2
Selling, general and administrative	33.2	30.7	25.4
Total share-based compensation expense	$48.3	$46.3	$39.6
Income tax benefit for share-based compensation	$(14.8)	$(14.2)	$(12.1)

The table below summarizes the effect of recording pre-tax share-based compensation expense for equity incentive awards:

	Fiscal Years		
(In millions)	2016	2015	2014
Stock options	$11.1	$11.3	$9.5
Restricted stock units and restricted stock awards[(1)]	33.0	31.4	26.6
Employee stock purchase plan	4.2	3.6	3.5
Total share-based compensation expense	$48.3	$46.3	$39.6

[(1)] Restricted stock units and restricted stock awards include performance units and deferred stock units.

A summary of share-based awards available for grant is as follows:

(In millions)	Shares Available for Grant
Balance at September 27, 2013	9.9
Granted	(1.9)
Canceled or expired	0.2
Balance at September 26, 2014	8.2
Granted	(1.8)
Canceled or expired	0.3
Balance at October 2, 2015	6.7
Granted	(2.4)
Canceled or expired	0.3
Balance at September 30, 2016	4.6

For purposes of the total number of shares available for grant under the Third Amended 2005 Plan, any shares subject to awards of stock options are counted against the available-for-grant limit as one share for every one share subject to the award. Awards other than stock options are counted against the available-for-grant limit as 2.6 shares for every one share awarded on or after February 9, 2012. The shares available for grant limit is further adjusted to reflect a maximum payout that could be issued for each performance unit granted. The maximum payouts that could be issued for each performance grant are 1.75 shares beginning in fiscal year 2016, 2.0 shares in fiscal year 2015 and 1.5 shares prior to fiscal year 2015. All awards may be subject to restrictions on transferability and continued employment as determined by the Compensation and Management Development Committee.

Activity under the Company's employee stock plans related to stock options is presented below:

(In millions, except per share amounts)	Options Outstanding	
	Number of Shares	Weighted Average Exercise Price
Balance at September 27, 2013	4.5	$ 53.02
Granted	0.6	83.50
Canceled, expired or forfeited	(0.1)	72.35
Exercised	(1.7)	49.01
Balance at September 26, 2014	3.3	60.53
Granted	0.6	92.29
Canceled, expired or forfeited	—	77.53
Exercised	(1.4)	52.83
Balance at October 2, 2015 (1.6 million options exercisable at a weighted average exercise price of $62.97)	2.5	72.58
Granted	0.8	75.97
Canceled, expired or forfeited	—	85.29
Exercised	(0.7)	57.23
Balance at September 30, 2016	2.6	$ 78.25

The total pre-tax intrinsic value of stock options exercised was $23.8 million, $51.1 million and $54.4 million in fiscal years 2016, 2015 and 2014, respectively. The total fair value of stock options vested was $10.2 million, $10.0 million and $10.7 million in fiscal years 2016, 2015 and 2014, respectively.

The following table summarizes information related to stock options outstanding and exercisable under the Company's employee stock plans at September 30, 2016:

	Options Outstanding				Options Exercisable			
Range of Exercise Prices	Number of Shares	Weighted Average Remaining Contractual Term (in years)	Weighted Average Exercise Price	Aggregate Intrinsic Value [1]	Number of Shares	Weighted Average Remaining Contractual Term (in years)	Weighted Average Exercise Price	Aggregate Intrinsic Value [1]
(In millions, except years and per-share amounts)								
$50.66 – $57.90	0.3	1.4	$ 55.47	$ 11.5	0.3	1.4	$ 55.47	$ 11.5
$64.01 – $72.26	0.3	2.9	68.59	10.7	0.3	2.9	68.59	10.7
$74.28 – $81.90	0.8	6.3	75.96	19.6	—	4.1	74.28	0.2
$83.70 – $92.65	1.2	4.9	88.28	12.6	0.8	4.8	87.21	9.2
Total	2.6	4.7	$ 78.25	$ 54.4	1.4	3.6	$ 76.31	$ 31.6

(1) The aggregate intrinsic value represents the total pre-tax intrinsic value, which is computed based on the difference between the exercise price and the closing price of VMS common stock of $99.53 as of September 30, 2016, the last trading date of fiscal year 2016, and which represents the amount that would have been received by the option holders had all option holders exercised their options and sold the shares received upon exercise as of that date.

As of September 30, 2016, there was $10.6 million of total unrecognized compensation expense related to stock options granted under the Company's employee stock plans. This unrecognized compensation expense is expected to be recognized over a weighted average period of 1.6 years.

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The activity for restricted stock, restricted stock units, deferred stock units and performance units is summarized as follows:

(In millions, except per share amounts)	Number of Shares	Weighted Average Grant-Date Fair Value
Balance at September 27, 2013	1.0	$ 64.36
Granted	0.5	82.51
Vested	(0.3)	63.70
Canceled or expired	(0.1)	70.69
Balance at September 26, 2014	1.1	72.08
Granted	0.4	93.01
Vested	(0.5)	67.93
Canceled or expired	(0.1)	68.51
Balance at October 2, 2015	0.9	84.11
Granted	0.5	78.11
Vested	(0.4)	80.88
Canceled or expired	—	81.94
Balance at September 30, 2016	1.0	$ 82.51

The total grant-date fair value of restricted stock units, deferred stock units and performance units was $38.4 million, $38.1 million and $38.7 million in fiscal years 2016, 2015 and 2014, respectively. The total fair value of restricted stock, restricted stock units, deferred stock units and performance units that vested was $31.7 million, $44.5 million and $25.4 million in fiscal years 2016, 2015 and 2014, respectively.

As of September 30, 2016, unrecognized compensation expense totaling $38.6 million was related to restricted stock, restricted stock units, deferred stock units and performance units granted under the Company's employee stock plans. This unrecognized share-based compensation expense is expected to be recognized over a weighted average period of 1.8 years. The Company withheld 0.1 million shares with a fair value of $11.0 million for employees' minimum withholding taxes at vesting of such awards in fiscal year 2016.

Employee Stock Purchase Plan

In February 2010, VMS's stockholders approved the 2010 Employee Stock Purchase Plan (the "2010 ESPP"). The 2010 ESPP provides eligible employees with an opportunity to purchase shares of VMS common stock at 85% of the lower of its fair market value at the start and end of a six-month purchase period. The 2010 ESPP provides for the purchase of up to seven million shares of VMS common stock.

VMS issued approximately 0.3 million shares for $17.2 million in fiscal year 2016 and approximately 0.2 million shares for $16.3 million in fiscal year 2015. At September 30, 2016, 5.6 million shares were available for issuance under the 2010 ESPP.

13. EARNINGS PER SHARE

The following table sets forth the computation of basic and diluted net earnings per share:

	Fiscal Years		
(In millions, except per share amounts)	2016	2015	2014
Net earnings attributable to Varian	$402.3	$411.5	$403.7
Weighted average shares outstanding - basic	95.4	99.7	104.0
Dilutive effect of potential common shares	0.6	0.9	1.3
Weighted average shares outstanding - diluted	96.0	100.6	105.3
Net earnings per share attributable to Varian - basic	$4.22	$4.13	$3.88
Net earnings per share attributable to Varian - diluted	$4.19	$4.09	$3.83
Anti-dilutive employee shared based awards, excluded	1.6	1.0	0.6

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14. TAXES ON EARNINGS

The Company accounts for income taxes under an asset and liability approach where deferred income taxes are based upon enacted tax laws and rates applicable to the periods in which the taxes become payable.

Taxes on earnings were as follows:

	Fiscal Years		
(In millions)	2016	2015	2014
Current provision:			
Federal	$89.4	$52.8	$86.6
State and local	10.4	8.4	6.1
Foreign	77.8	76.1	62.2
Total current	177.6	137.3	154.9
Deferred provision (benefit):			
Federal	(13.6)	2.5	5.0
State and local	(1.2)	(0.6)	(0.1)
Foreign	(9.1)	3.5	11.0
Total deferred	(23.9)	5.4	15.9
Taxes on earnings	$153.7	$142.7	$170.8

Earnings before taxes are generated from the following geographic areas:

	Fiscal Years		
(In millions)	2016	2015	2014
United States	$187.0	$223.9	$173.9
Foreign	369.4	330.8	400.6
Total earnings before taxes	$556.4	$554.7	$574.5

The effective tax rate differs from the U.S. federal statutory tax rate as a result of the following:

	Fiscal Years		
	2016	2015	2014
Federal statutory income tax rate	35.0 %	35.0 %	35.0 %
State and local taxes, net of federal tax benefit	0.7 %	0.8 %	0.8 %
Non-U.S. income taxed at different rates, net	(7.3)%	(9.2)%	(5.2)%
Other	(0.8)%	(0.9)%	(0.9)%
Effective tax rate	27.6 %	25.7 %	29.7 %

During fiscal years 2016, 2015 and 2014, the Company’s effective tax rate was lower than the U.S. federal statutory rate primarily because the Company’s foreign earnings are taxed at rates that, on average, are lower than the U.S. federal rate. This reduction is partly offset by the fact that the Company’s domestic earnings are also subject to state income taxes.

Significant components of deferred tax assets and liabilities are as follows:

(In millions)	September 30, 2016	October 2, 2015
Deferred Tax Assets:		
Deferred revenues	$ 30.2	$ 28.2
Deferred compensation	38.9	33.5
Product warranty	11.9	10.5
Inventory adjustments	21.5	20.9
Share-based compensation	22.3	22.8
Environmental reserve	4.2	4.3
Accruals and reserves	15.7	14.3
Net operating loss carryforwards	106.6	92.6
Other	39.1	31.7
	290.4	258.8
Valuation allowance	(79.6)	(69.7)
Total deferred tax assets	210.8	189.1
Deferred Tax Liabilities:		
Tax-deductible goodwill	(24.6)	(23.3)
Property, plant and equipment	(25.1)	(15.5)
Unremitted earnings of foreign subsidiaries	(20.2)	(27.9)
Other	(28.6)	(34.8)
Total deferred tax liabilities	(98.5)	(101.5)
Net deferred tax assets	$ 112.3	$ 87.6
Reported As:		
Deferred tax assets	138.9	119.4
Deferred tax liabilities (included in other long-term liabilities)	(26.6)	(31.8)
Net deferred tax assets	$ 112.3	$ 87.6

The Company has not provided for U.S. federal income and foreign withholding taxes on $1,947.8 million of cumulative undistributed earnings of non-U.S. subsidiaries as of September 30, 2016. Such earnings are intended to be reinvested in the non-U.S. subsidiaries for an indefinite period of time. If such earnings were not considered to be reinvested indefinitely, an additional deferred taxes liability of approximately $504.3 million would be provided.

The Company has federal net operating loss carryforwards of approximately $10.7 million expiring between 2018 and 2032. The federal net operating loss carryforwards are subject to an annual limitation of approximately $1.3 million per year. The Company has state net operating loss carryforwards of $9.1 million expiring between 2018 and 2032. The Company has foreign net operating loss carryforwards of $333.1 million with an indefinite life. Of this amount, $31.2 million is unavailable to the Company under local loss utilization rules.

The valuation allowance relates primarily to net operating losses in certain foreign jurisdictions where, based on the weight of available evidence, it is more likely than not that the tax benefit of the net operating losses will not be realized. The valuation allowance increased by $9.9 million, $2.2 million and $6.8 million in fiscal years 2016, 2015 and 2014, respectively.

Income taxes paid were as follows:

	Fiscal Years		
(In millions)	2016	2015	2014
Federal income taxes paid, net	$78.3	$57.1	$66.2
State, income taxes paid, net	5.0	7.2	7.3
Foreign income taxes paid, net	72.6	55.5	67.3
Total income taxes paid, net	$155.9	$119.8	$140.8

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The Company accounts for uncertainty in income taxes following a two-step approach for recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining whether the weight of available evidence indicates that it is more likely than not that, based on the technical merits, the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon settlement.

Changes in the Company's unrecognized tax benefits were as follows:

	Fiscal Years		
(In millions)	2016	2015	2014
Unrecognized tax benefits balance–beginning of fiscal year	$39.5	$49.6	$37.0
Additions based on tax positions related to a prior year	0.6	—	10.7
Reductions based on tax positions related to a prior year	(0.8)	(9.9)	(0.3)
Additions based on tax positions related to the current year	6.6	5.7	8.2
Settlements	—	—	(0.4)
Reductions resulting from the expiration of the applicable statute of limitations	(5.2)	(5.9)	(5.6)
Unrecognized tax benefits balance–end of fiscal year	$40.7	$39.5	$49.6

As of September 30, 2016, the total amount of gross unrecognized tax benefits was $40.7 million. Of this amount, $35.1 million would affect the effective tax rate if recognized. The difference would be offset by changes to deferred tax assets and liabilities.

The Company includes interest and penalties related to income taxes within taxes on earnings on the Consolidated Statements of Earnings. As of September 30, 2016, the Company had accrued $8.0 million for the payment of interest and penalties related to unrecognized tax benefits. During fiscal year 2016, a net expense of $0.8 million related to interest and penalties was included in taxes on earnings in the Consolidated Statements of Earnings. As of October 2, 2015, the Company had accrued $7.1 million for the payment of interest and penalties related to unrecognized tax benefits. During fiscal year 2015, a net benefit of $0.5 million related to interest and penalties was included in taxes on earnings in the Consolidated Statements of Earnings.

The Company files U.S. federal, U.S. state, and foreign tax returns. The Company's U.S. federal tax returns are generally no longer subject to tax examinations for years prior to 2013. The Company has significant operations in Switzerland. The Company's Swiss tax returns are generally no longer subject to tax examinations for years prior to 2012. For U.S. states and other foreign tax returns, the Company is generally no longer subject to tax examinations for years prior to 2007.

15. BUSINESS COMBINATIONS

Business Combination in Fiscal Year 2016

Candela

In September 2016, the Company closed the acquisition of the radiotherapy business of Candela sp. z o.o. ("Candela"), a distributor of Varian's radiotherapy equipment in Poland. The Company integrated the acquired Candela business into its Oncology Systems reporting unit to strengthen its market position in Poland.

The following table presents the total purchase consideration:

(In millions)	Purchase Consideration
Cash paid	$ 13.0
Net non-cash assets transferred [1]	21.7
Escrow payable	0.5
Total purchase consideration	$ 35.2

[1] Primarily comprised of accounts receivable.

The following table summarizes the purchase price allocation:

(In millions)	Fair Value
Net assumed liabilities	$(1.1)
Finite-lived intangible assets with a weighted average useful life of 6.2 years	24.9
Goodwill	11.4
Net assets acquired	$35.2

Business Combinations in Fiscal Year 2015

In September 2015, the Company purchased certain assets comprising a business from a sole proprietor for treatment planning software tools that will enhance both planning efficiency and treatment plan quality and allow oncologists to quickly adjust their intended dose distributions ahead of the treatment planning process. Through the acquisition, the Company also entered into a consulting agreement with the sole proprietor. The acquired assets were integrated into the Company's Oncology Systems reporting unit. The Company paid a total of $27.0 million in cash for all of the assets. The following table summarizes the purchase price allocation:

(In millions)	Fair Value
Finite-lived intangible assets with a weighted average useful life of 8.3 years	$ 8.3
Indefinite-lived intangible assets — IPR&D	8.8
Goodwill	9.9
Net assets acquired	$ 27.0

Claymount

In August 2015, the Company acquired Claymount Investments B.V. (“Claymount”), a Netherlands-based supplier of components and subsystems for X-ray imaging equipment manufacturers. The Company integrated Claymount into its X-ray imaging tubes and flat panel products reporting unit to enhance its ability to support a continuing industry-wide transition from analog to digital X-ray imaging. Total purchase price of the acquisition of $58.0 million was paid in cash. The following table summarizes the purchase price allocation:

(In millions)	Fair Value
Net tangible assets [1]	$ 11.3
Finite-lived intangible assets with a weighted average useful life of 6.0 years	16.2
Goodwill	30.5
Net assets acquired	$ 58.0

[1] Includes $1.9 million in cash and cash equivalents.

MeVis

In April 2015, the Company completed the acquisition of 73.5% of the then outstanding shares of MeVis, a public company based in Bremen, Germany that provides image processing software and services for cancer screening, using $25.5 million in cash. The acquisition of MeVis was integrated into the Company's X-ray tubes and flat panel products reporting unit. The following table summarizes the purchase price allocation:

(In millions)	Fair Value
Net tangible assets [1]	$ 21.7
Finite-lived intangible assets with a weighted average useful life of 5.4 years	5.8
Goodwill	8.2
Fair value of net assets	35.7
Less: Noncontrolling interests[2]	10.2
Net assets acquired	$ 25.5

[1] Includes $13.9 million cash and cash equivalents.

[2] Fair value was determined using the market price of the shares of MeVis as of the acquisition date.

Business Combinations in Fiscal Year 2014

Transpire

In July 2014, the Company closed the acquisition of certain assets and liabilities of Transpire, Inc. (“Transpire”), a privately-held developer of software solutions for accurately and rapidly predicting the macroscopic behavior of radiation. The Company’s Oncology Systems reporting unit integrated Transpire’s dose calculation software to improve its image guidance tools and deliver high-precision radiotherapy for the treatment of cancer. The Company’s Security and inspection products reporting unit is using certain other Transpire software to provide comprehensive solutions for customers that integrate the Company’s high-energy X-ray technology into systems for cargo screening, industrial inspection and non-destructive testing. The acquisition was accounted for as a business combination. Total purchase price of the acquisition of $19.3 million consisted of $16.0 million in cash and $3.3 million of earn-out consideration measured at fair value. The following table summarizes the purchase price allocation:

(In millions)	Fair Value
Net assumed liabilities	$ (0.1)
Finite-lived intangible assets with a weighted average useful life of 6.1 years [1]	8.7
Indefinite-lived intangible assets — IPR&D	2.0
Goodwill [2]	8.7
Net assets acquired	$ 19.3

[1] $6.0 million was allocated to the Company’s Oncology Systems reporting unit and $2.7 million to the Company’s Security and inspection products reporting unit.

[2] $5.9 million was allocated to the Company's Oncology Systems reporting unit and $2.8 million to the Company's Security and inspection products reporting unit.

Velocity

In April 2014, the Company closed the acquisition of certain assets of Velocity Medical Solutions LLC (“Velocity”), a privately-held Atlanta-based developer of specialized software for cancer clinics. The Velocity software aggregates unstructured treatment and imaging data from diverse systems to give a more comprehensive view of a patient's diagnostic imaging and treatment history and help clinicians make more informed treatment decisions. The acquired assets of Velocity were integrated into the Company’s Oncology Systems reporting unit. The total purchase price of the acquisition of $19.9 million consisted of $17.0 million in cash (of which $2.6 million was held back) and $2.9 million of earn-out consideration measured at fair value. The following table summarizes the purchase price allocation:

(In millions)	Fair Value
Net assumed liabilities	$ (0.5)
Finite-lived intangible assets with a weighted average useful life of 6.1 years	10.6
Goodwill	9.8
Net assets acquired	$ 19.9

Other information

All acquisitions listed above were accounted for as business combinations. Total transaction costs related to the Company's acquisitions incurred during fiscal years 2016, 2015 and 2014 were $3.1 million, $3.3 million, and $0.7 million respectively. These transaction costs were expensed as incurred in selling, general and administrative expenses in the Consolidated Statements of Earnings.

The Company's purchase price allocation for its acquisition completed during fiscal year 2016 is preliminary and subject to revision as additional information about fair value of assets and liabilities becomes available. Additional information, which existed as of the acquisition date but at that time was unknown to the Company, may become known to the Company during the remainder of the measurement period, a period not to exceed 12 months from the acquisition date. Adjustments in the purchase price allocation will be recognized in the reporting period in which these adjustments are identified.

The goodwill generated from the Company's acquisitions completed is primarily attributable to expected synergies. The goodwill is deductible for income tax purposes for all acquisitions except Candela, MeVis and Claymount. The Consolidated Financial Statements include the operating results of each acquisition from the date of acquisition. Pro forma results of operations for the acquisitions completed during the fiscal years presented have not been presented because the effects of the acquisitions, individually and in the aggregate, were not material to the Company's financial results.

16. VPT LOANS

The following table lists the Company's outstanding loans and commitments for funding development and construction of various proton therapy centers:

	September 30, 2016		October 2, 2015	
(In millions)	Balance	Commitment	Balance	Commitment
Long-term notes receivable [1]:				
NYPC loan	$ 18.5	$ —	$ 18.7	$ 72.8
MPTC loans [2]	40.7	11.4	12.2	22.8
	$ 59.2	$ 11.4	$ 30.9	$ 95.6
Available-for-sale Securities [3]:				
CPTC loans	$ 95.3	$ 1.1	$ 83.9	—
	$ 95.3	$ 1.1	$ 83.9	$ —

(1) Included in other assets on the Company's Consolidated Balance Sheets.

(2) Increase in balance includes a $17.1 million conversion from long-term unbilled accounts receivable to long-term notes receivable.

(3) Included in short-term investment at September 30, 2016, and in other assets as of October 2, 2015 on the Company's Consolidated Balance Sheets.

New York Proton Center ("NYPC") Loan

In July 2015, the Company, through one of its subsidiaries, committed to loan up to $91.5 million to MM Proton I, LLC in connection with a purchase agreement to supply a proton system to equip the NYPC. The commitment includes a $73.0 million "Senior First Lien Loan" with a six-year term at 9% interest and an $18.5 million "Subordinate Loan" with a six-and-a-half-year term at up to 13.5% interest. The Company's entire commitment of the Subordinate Loan was drawn down in fiscal year 2015. In June 2016, the Company assigned to Deutsche Bank AG ("Deutsche Bank") its entire $73.0 million Senior First Lien Loan commitment. As of the date of the assignments, $10.5 million in aggregate principal amount of Senior First Lien Loan commitments had been funded by the Company. The total consideration paid by Deutsche Bank to the Company in consideration for the assignment was approximately $8.3 million in cash, representing the funded portion, less a discount of 3% of the Company's total Senior First Lien Loan commitment, both funded and unfunded. The Company recorded a $2.2 million impairment associated with the sale of the loan in selling, general and administrative in the Consolidated Statements of Earnings in fiscal year 2016.

In addition to the outstanding loan, the Company had $17.4 million, as of September 30, 2016, in accounts receivable, which includes unbilled accounts receivable, from NYPC. As of October 2, 2015, the Company did not have any accounts receivable from NYPC.

Maryland Proton Therapy Center ("MPTC") Loans

In May 2015, the Company, through one of its subsidiaries, committed to loan up to $35.0 million to MPTC. A total of $12.2 million (consisting of $10.0 million principal amount and $2.2 million in accrued interest) of a previously existing loan was rolled over into the loan commitment. The Company had previously entered into an agreement with MPTC to supply it with a proton system. Varian loaned MPTC $11.4 million in September 2016, and in October 2016 loaned the remaining $11.4 million of its commitment. Varian's lending is in the form of a subordinated loan that is due, with accrued interest, in three annual payments from 2020 to 2022. The interest on the loan accrues at 12%. During fiscal year 2016, the Company converted $17.1 million in deferred payment arrangements, previously recorded as long-term unbilled accounts receivable, with MPTC to a long-term note receivable due September 30, 2018. The note receivable carries an interest rate of 15%.

In addition to the outstanding loan, the Company had recorded $9.2 million and $28.6 million as of September 30, 2016 and October 2, 2015, respectively, in accounts receivable from MPTC, which included unbilled accounts receivable.

CPTC Loans

In September 2011, ORIX and the Company, through its Swiss subsidiary, committed to loan up to $165.3 million (“Tranche A loan”) to CPTC to fund the development, construction and initial operations of the Scripps Proton Therapy Center in San Diego, California. ORIX is the loan agent for this facility and, along with CPTC and Scripps, has budgetary approval authority for the Scripps Proton Therapy Center. The Company’s maximum loan commitment under the Tranche A loan was $115.3 million. In June 2014, the Company, through its Swiss subsidiary, entered into a series of agreements, pursuant to which J.P. Morgan assumed $45.0 million of the Company’s original maximum commitment of $115.3 million, reducing the Company’s maximum commitment under the Tranche A loan to $70.3 million. Pursuant to these agreements, J.P. Morgan purchased $38.1 million of the Company’s outstanding Tranche A loan at par value. Through these agreements, the Company’s Swiss subsidiary also increased its individual loan commitment by $10.0 million (“Tranche B loan”). The Tranche B loan is subordinated to the Tranche A loan in the event of default, but otherwise has the same terms as the Tranche A loan. In November 2015, ORIX, J.P. Morgan and the Company (collectively the “Lenders”) and CPTC entered into a forbearance agreement whereby the lenders will not enforce their rights to principal and interest payments until April 2017, subject to CPTC maintaining certain covenants and achieving certain targets, with additional extensions through September 2017 based on hitting additional targets largely around patient volume and cash flow. In connection with the forbearance agreement the Lenders agreed to make available up to an additional $9.7 million of loan proceeds (based on their pro-rata share of the existing loan) with terms similar to the Tranche A loan for additional working capital needs; the Company's proportionate share of this commitment is $4.4 million ("Tranche C loan"). There were no other significant changes to the loan agreements. As of September 30, 2016, even though patient volumes continued to increase, CPTC was not in compliance with one of the patient volume covenants in the forbearance agreement, which would allow the Lenders to cease funding under the Tranche C loan and terminate the forbearance agreement. The Tranche A, Tranche B, and Tranche C loans are collectively, referred to as the “CPTC Loans.”

As of September 30, 2016, the Company had loaned $80.5 million under the Tranche A loan, $11.4 million under the Tranche B loan, and $3.4 million under the Tranche C loan. No amounts were available for draw down under the Tranche A and Tranche B loans. As of September 30, 2016, the Company's remaining commitment under the Tranche C loan is expected to be drawn down over the next 12 months, subject to approval by the lenders due to CPTC's non-compliance with one of the covenants under the forbearance agreement. As of October 2, 2015, the Company had loaned $73.5 million under the Tranche A loan and $10.4 million under the Tranche B loan. The amounts loaned under the CPTC Loans include accrued interest. During the fourth quarter of fiscal year 2016, the Company reclassified the CPTC Loans from other assets to short-term investments on the Company's Consolidated Balance Sheet as the loans are due in the next fiscal year.

The amounts loaned under the CPTC Loans include accrued interest. ORIX has the option to purchase the Company's share of the CPTC loans at par. The CPTC Loans meet the definition of a debt security and therefore are accounted for as available-for-sale securities and recorded at fair value as of September 30, 2016 and October 2, 2015. The CPTC Loans are collateralized by all of the assets of the Scripps Proton Therapy Center. The CPTC Loans mature in September 2017 and bear interest at the London Interbank Offer Rate ("LIBOR") plus 7.00% per annum with a minimum interest rate of 9.00% per annum. Interest only payments on the CPTC Loans were due monthly in arrears until January 1, 2015, at which time monthly payments based on amortization of the principal balance over a 15-year period at the above mentioned interest rate become due and payable. To date, no amortizing principal payments have been made. The principal and interest payments are subject to the forbearance agreement mentioned above.

As of September 30, 2016 and October 2, 2015, the Company had recorded $32.6 million and $25.2 million in accounts receivable from CPTC, respectively, which included unbilled accounts receivable.

The Company has determined that MM Proton I, LLC, MPTC and CPTC are variable interest entities and that the Company holds a significant variable interest of each of the entities through its participation in the loan facilities and its agreements to supply and service the proton therapy equipment. The Company has concluded that it is not the primary beneficiary of any of these entities. The Company has no voting rights, has no approval authority or veto rights for these centers' budget, and does not have the power to direct patient recruitment, clinical operations and management of these Centers, which the Company believes are the matters that most significantly affect their economic performance. The Company's exposure to loss as a result of its involvement with MM Proton I, LLC, MPTC and CPTC is limited to the carrying amounts of the above mentioned assets on its Consolidated Balance Sheets.

17. SEGMENT INFORMATION

The Company's operations are grouped into two reportable operating segments: Oncology Systems and Imaging Components. The Company's GTC and VPT business are reflected in the "Other" category because these operating segments do not meet the criteria of a reportable operating segment. The operating segments were determined based on how the Company's Chief Executive Officer, its Chief Operating Decision Maker ("CODM"), views and evaluates the Company's operations. The CODM allocates resources to and evaluates the financial performance of each operating segment primarily based on operating earnings.

Description of Segments

The Oncology Systems segment designs, manufactures, sells and services hardware and software products for treating cancer with conventional radiation therapy, and advanced treatments such as fixed field intensity-modulated radiation therapy("IMRT"), image-guided radiation therapy ("IGRT"), VMAT, stereotactic radiosurgery ("SRS"), stereotactic body radiotherapy("SBRT") and brachytherapy. Products include linear accelerators, brachytherapy afterloaders, treatment simulation and verification equipment and accessories; as well as information management, treatment planning and image processing software. Oncology Systems' products enable radiation oncology departments in hospitals and clinics to perform conventional radiotherapy treatments and offer advanced treatments such as IMRT, IGRT, VMAT, SRS and SBRT, as well as to treat patients using brachytherapy techniques, which involve temporarily implanting radioactive sources. The Company's Oncology Systems products are also used by neurosurgeons to perform stereotactic radiosurgery. Oncology Systems' customers worldwide include university research and community hospitals, private and governmental institutions, healthcare agencies, physicians' offices and cancer care clinics.

The Imaging Components segment designs, manufactures, sells and services X-ray imaging components for use in a range of applications, including radiographic or fluoroscopic imaging, mammography, special procedures, computed tomography, computer-aided diagnostics and industrial applications. The Company provides a broad range of X-ray imaging components including X-ray tubes, flat panel digital image detectors, high voltage connectors, image processing software and workstations, computer-aided diagnostic software, collimators and automatic exposure control devices. The Company's X-ray imaging components are sold to imaging system OEM customers that incorporate them into their medical diagnostic, dental, veterinary and industrial imaging systems, to independent service companies and directly to end-users for replacement purposes. The Imaging Components segment also designs, manufactures, sells and services security and inspection products, which include Linatron X-ray accelerators, imaging processing software and image detection products for security and inspection purposes, such as cargo screening at ports and borders and nondestructive examination in a variety of applications. The Company generally sells security and inspection products to OEM customers who incorporate its products into their inspection systems.

The Company's GTC and VPT business are reported together under the "Other" category.

The VPT business develops, designs, manufactures, sells and services products and systems for delivering proton therapy, a form of external beam radiotherapy using proton beams for the treatment of cancer.

GTC develops technologies that enhance the Company's current businesses or may lead to new business areas, including technology to improve radiation therapy and X-ray imaging, as well as other technology for a variety of applications. Subsequent to fiscal year 2016, GTC was absorbed into primarily the Company's Oncology Systems and Imaging Components businesses and is no longer a separate business.

Accordingly, the following information is provided for purposes of achieving an understanding of operations, but may not be indicative of the financial results of the reported segments were they independent organizations. In addition, comparisons of the Company's operations to similar operations of other companies may not be meaningful.

Segment Data

	Revenues			Operating Earnings[1]		
	Fiscal Years			Fiscal Years		
(In millions)	2016	2015	2014	2016	2015	2014
Oncology Systems	$2,457.1	$2,344.0	$2,344.2	$550.5	$485.4	$495.5
Imaging Components	597.6	611.2	660.2	110.7	131.3	169.9
Total reportable segments	3,054.7	2,955.2	3,004.4	661.2	616.7	665.4
Other	163.1	143.9	45.4	(48.9)	(31.2)	(52.7)
Corporate	—	—	—	(61.5)	(36.5)	(41.5)
Total Company	$3,217.8	$3,099.1	$3,049.8	$550.8	$549.0	$571.2

(1) Operating earnings of reportable segments and Other include an allocation of corporate expenses based on a percentage of their sales.

	Depreciation & Amortization			Total Assets		
	Fiscal Years			Fiscal Years		
(In millions)	2016	2015	2014	2016	2015	2014
Oncology Systems	$33.8	$27.2	$24.8	$1,491.2	$1,412.5	$1,314.1
Imaging Components	19.0	15.7	14.7	587.9	555.4	431.6
Total reportable segments	52.8	42.9	39.5	2,079.1	1,967.9	1,745.7
Other	7.4	4.9	1.0	369.9	296.2	278.6
Corporate	19.6	20.7	22.0	1,367.0	1,314.6	1,314.4
Total Company	$79.8	$68.5	$62.5	$3,816.0	$3,578.7	$3,338.7

The reconciliation of segment operating earnings to the Company's earnings before taxes was as follows:

	Fiscal Years		
	2016	2015	2014
Oncology Systems	$550.5	$485.4	$495.5
Imaging Components	110.7	131.3	169.9
Total reportable segments	661.2	616.7	665.4
Other	(48.9)	(31.2)	(52.7)
Corporate	(61.5)	(36.5)	(41.5)
Interest income, net	5.6	5.7	3.3
Total earnings before taxes	$556.4	$554.7	$574.5

Geographic Information

	Revenues			Property, plant and equipment, net		
	Fiscal Years			Fiscal Years		
(In millions)	2016	2015	2014	2016	2015	2014
United States	$1,352.8	$1,418.3	$1,290.1	$286.7	$292.6	$262.7
International	1,865.0	1,680.8	1,759.7	92.5	86.6	75.3
Total Company	$3,217.8	$3,099.1	$3,049.8	$379.2	$379.2	$338.0

The Company operates various manufacturing and marketing operations outside the United States. Allocation between domestic and foreign revenues is based on the final destination of products sold. Japan represented approximately

11%, 11%,

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and 13% of the Company's total revenues in fiscal years 2016, 2015 and 2014, respectively. Intercompany and intracompany profits are eliminated in consolidation.

18. QUARTERLY FINANCIAL DATA (UNAUDITED)

	Fiscal Year 2016				
(In millions, except per share amounts)	First Quarter	Second Quarter	Third Quarter [1]	Fourth Quarter [2]	Total Year
Total revenues	$757.1	$758.8	$789.4	$912.5	$3,217.8
Gross margin	$309.7	$317.2	$346.4	$388.0	$1,361.3
Net earnings attributable to Varian	$89.0	$97.0	$98.8	$117.5	$402.3
Net earnings per share – basic	$0.92	$1.01	$1.04	$1.25	$4.22
Net earnings per share – diluted	$0.91	$1.01	$1.04	$1.24	$4.19

	Fiscal Year 2015				
(In millions, except per share amounts)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total Year
Total revenues	$737.9	$759.4	$784.0	$817.8	$3,099.1
Gross margin	$327.0	$322.5	$315.0	$318.2	$1,282.7
Net earnings attributable to Varian	$93.3	$106.0	$113.5	$98.7	$411.5
Net earnings per share – basic	$0.93	$1.06	$1.14	$1.00	$4.13
Net earnings per share – diluted	$0.92	$1.05	$1.13	$0.99	$4.09

(1) In the third quarter of fiscal year 2016, net earnings attributable to Varian include $5.4 million in costs relating to the separation of Imaging Components business.

(2) In the fourth quarter of fiscal year 2016, net earnings attributable to Varian include $11.5 million in costs relating to the separation of Imaging Components business.

REPORT OF MANAGEMENT ON INTERNAL CONTROL
OVER FINANCIAL REPORTING

Management of Varian Medical Systems, Inc. and its subsidiaries (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. 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 in the United States of America.

Internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles in the United States of America, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) 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 consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions and 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 September 30, 2016. In making this assessment, management used the criteria set forth in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on its assessment and those criteria, management concluded that the Company maintained effective internal control over financial reporting as of September 30, 2016. PricewaterhouseCoopers LLP has issued a report on the Company's internal control over financial reporting as of September 30, 2016, which appears immediately after this report.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Varian Medical Systems, Inc.:

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of Varian Medical Systems, Inc. and its subsidiaries at September 30, 2016 and October 2, 2015, and the results of their operations and their cash flows for each of the three years in the period ended September 30, 2016 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 30, 2016, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control over Financial Reporting. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated 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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting 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 audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it classifies deferred tax assets and liabilities in fiscal year 2016.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) 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.

/S/ PRICEWATERHOUSECOOPERS LLP

San Jose, California
November 23, 2016

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure
None.

Item 9A. Controls and Procedures

(a) Evaluation of disclosure controls and procedures. Based on the evaluation of our disclosure controls and procedures (as defined in the Rules 13a-15(e) and 15d-15(e) under the Exchange Act required by Exchange Act) Rules 13a-15(b) or 15d-15(b), our principal executive officer and principal financial officer have concluded that as of the end of the period covered by this report, our disclosure controls and procedures were effective to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and include controls and procedures designed to ensure that information required to be disclosed by us in such reports is accumulated and communicated to our management, including the principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

(b) Report of management on internal control over financial reporting. The information required to be furnished pursuant to this item is set forth under the caption “Report of Management on Internal Control over Financial Reporting” under Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K, and is incorporated here by reference.

(c) Changes in internal control over financial reporting. There were no changes in our internal control over financial reporting that occurred during our fourth fiscal quarter of fiscal year 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information
None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Directors and Executive Officers

The information required by this item with respect to our executive officers is set forth in Part I of this Annual Report on Form 10-K. The information required by this item with respect to our directors, our Audit Committee and its members, and audit committee financial expert is incorporated by reference from our definitive proxy statement for the 2017 Annual Meeting of Stockholders under the caption “Proposal One—Election of Directors.” The information required by this item with respect to compliance with Section 16(a) of the Exchange Act is incorporated by reference from our definitive proxy statement for the 2017 Annual Meeting of Stockholders under the caption “Stock Ownership—Section 16(a) Beneficial Ownership Reporting Compliance.”

Code of Conduct

We have adopted a Code of Conduct that applies to all of our executive officers and directors. The Code of Conduct is posted on our website. The Internet address for our website is http://www.varian.com, and the Code of Conduct may be found as follows:

1. From our main web page, first click “Investors.”
2. Next click on “Corporate Governance” in the left hand navigation bar.
3. Finally, click on “Code of Conduct.”

We intend to satisfy the disclosure requirements under Item 5.05(c) of Form 8-K regarding an amendment to, or waiver from, a provision of the Code of Conduct that applies to our principal executive officer, principal financial officer, principal accounting officer or controller or persons performing similar functions by posting such information on our website, at the address and location specified above.

Item 11. Executive Compensation

The information required by this item is incorporated by reference from our definitive proxy statement for the 2017 Annual Meeting of Stockholders under the caption “Compensation of the Named Executive Officers and Directors.”

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

Equity Compensation Plan Information

The following table provides information as of September 30, 2016 with respect to the shares of VMS common stock that may be issued under existing equity compensation plans.

(in millions, except price per share)	A Number of securities to be issued upon exercise of outstanding options, warrants and rights		B Weighted average exercise price of outstanding options, warrants and rights [1]	C Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column A)	
Equity compensation plans approved by security holders	3.7	[2]	$ 78.25	10.2	[3]
Total	3.7		$ 78.25	10.2	

[1] The weighted average exercise price does not take into account the shares issuable upon vesting of outstanding restricted stock units, deferred stock units and performance units, which have no exercise price.

[2] Consists of stock options, restricted stock units, deferred stock units and performance units granted under the Third Amended and Restated 2005 Omnibus Stock Plan (the “Third Amended 2005 Plan”). The shares available for grant

limit is further adjusted to reflect a maximum payout of 1.75 shares that could be issued for each performance unit

granted in fiscal year 2016, 2.0 shares that could be issued for each performance unit granted in fiscal year 2015 and a maximum payout of 1.5 shares that could be issued for each performance unit granted prior to fiscal year 2015.

(3) Includes 5.6 million shares available for future issuance under the 2010 Employee Stock Purchase Plan.

For a description of the material features of the Third Amended 2005 Plan, see Note 12, "Employee Stock Plans" of the Notes to the Consolidated Financial Statements, which description is incorporated by reference.

The information required by this item with respect to the security ownership of certain beneficial owners and the security ownership of directors and executive officers is incorporated by reference from our definitive proxy statement for the 2017 Annual Meeting of Stockholders under the caption “Stock Ownership—Beneficial Ownership of Certain Stockholders, Directors and Executive Officers.”

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

The information required by this item with respect to certain relationships and related transactions is incorporated by reference from our definitive proxy statement for the 2017 Annual Meeting of Stockholders under the caption “Certain Relationships and Related Transactions.” The information required by this item with respect to director and committee member independence is incorporated by reference from our definitive proxy statement for the 2017 Annual Meeting of Stockholders under the caption “Proposal One—Election of Directors.”

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated by reference from our definitive proxy statement for the 2017 Annual Meeting of Stockholders under the caption “Proposal Five—Ratification of the Appointment of Our Independent Registered Public Accounting Firm.”

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) The following documents are filed as part of this report:

(1) Consolidated Financial Statements:

- Consolidated Statements of Earnings
- Consolidated Statements of Comprehensive Earnings
- Consolidated Balance Sheets
- Consolidated Statements of Cash Flows
- Consolidated Statements of Equity
- Notes to the Consolidated Financial Statements
- Report of Independent Registered Public Accounting Firm

(2) Consolidated Financial Statement Schedule:

The following financial statement schedule of the Registrant and its subsidiaries for fiscal years 2016, 2015 and 2014 is filed as a part of this report and should be read in conjunction with the Consolidated Financial Statements of the Registrant and its subsidiaries:

Schedule	
II	Valuation and Qualifying Accounts

All other schedules are omitted because of the absence of conditions under which they are required or because the required information is given in the financial statements or the notes thereto.

(3) Exhibits:

The exhibits listed in the accompanying index to exhibits are filed or incorporated by reference as part of this Form 10-K.

SIGNATURES

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

Dated: November 23, 2016

VARIAN MEDICAL SYSTEMS, INC.

By: /s/ ELISHA W. FINNEY
Elisha W. Finney
Executive Vice President, Finance and
Chief Financial Officer

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

Signature	Capacity	Date
/s/ DOW R. WILSON Dow R. Wilson	President and Chief Executive Officer and Director (Principal Executive Officer)	November 23, 2016
/s/ ELISHA W. FINNEY Elisha W. Finney	Executive Vice President, Finance and Chief Financial Officer (Principal Financial Officer)	November 23, 2016
/s/ CLARENCE R. VERHOEF Clarence R. Verhoef	Senior Vice President, Finance and Corporate Controller (Principal Accounting Officer)	November 23, 2016
/s/ R. ANDREW ECKERT R. Andrew Eckert	Chairman of the Board	November 23, 2016
/s/ TIMOTHY E. GUERTIN Timothy E. Guertin	Vice Chairman of the Board	November 23, 2016
/s/ SUSAN L. BOSTROM Susan L. Bostrom	Director	November 23, 2016
/s/ REGINA E. DUGAN Regina E. Dugan	Director	November 23, 2016
/s/ DAVID J. ILLINGWORTH David J. Illingworth	Director	November 23, 2016
/s/ MARK R. LARET Mark R. Laret	Director	November 23, 2016
/s/ RUEDIGER NAUMANN-ETIENNE Ruediger Naumann-Etienne	Director	November 23, 2016
/s/ ERICH R. REINHARDT Erich R. Reinhardt	Director	November 23, 2016
/s/ JUDY BRUNER Judy Bruner	Director	November 23, 2016

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Schedule II
VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES
VALUATION AND QUALIFYING ACCOUNTS

Fiscal Year	Description	Balance at Beginning of Period	Charged to Bad Debt Expense	Write-offs Adjustments Charged to Allowance	Balance at End of Period
		(In millions)			
2016	Allowance for doubtful accounts receivable	$21.2	$ 3.5	$ (0.3)	$ 24.4
2015	Allowance for doubtful accounts receivable	$20.3	$ 1.1	$ (0.2)	$ 21.2
2014	Allowance for doubtful accounts receivable	$14.7	$ 7.2	$ (1.6)	$ 20.3

Fiscal Year	Description	Balance at Beginning of Period	Increases	Deductions	Balance at End of Period
		(In millions)			
2016	Valuation allowance for deferred tax assets	$69.7	$ 12.2	$ (2.3)	$ 79.6
2015	Valuation allowance for deferred tax assets	$67.5	$ 4.7	$ (2.5)	$ 69.7
2014	Valuation allowance for deferred tax assets	$60.7	$ 8.3	$ (1.5)	$ 67.5

EXHIBIT INDEX

Exhibit Number	Description
2	Amended and Restated Distribution Agreement, dated as of January 14, 1999, by and among Varian Associates, Inc. (which has been renamed Varian Medical Systems, Inc.), Varian, Inc. and Varian Semiconductor Equipment Associates, Inc. (incorporated by reference to Exhibit No. 2 to the Registrant's Form 8-K Current Report filed as of April 19, 1999, File No. 1-7598).
3.1	Registrant's Amended and Restated Certificate of Incorporation, as amended (incorporated by reference to Exhibit No. 3.1 to the Registrant's Form 8-K Current Report filed as of August 18, 2014, File No. 1-7598).
3.2	Registrant's By-Laws, as amended, effective November 18, 2016 (incorporated by reference to Exhibit No. 3.1 to the Registrant's Form 8-K Current Report filed as of November 21, 2016, File No. 1-7598).
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit No. 4.1 to the Registrant's Form 10-Q Quarterly Report for the quarter ended April 2, 1999, File No. 1-7598).
10.1†	Form of Registrant's Indemnity Agreement with the directors and executive officers (incorporated by reference to Exhibit No. 10.3 to the Registrant's Form 10-Q Quarterly Report for the quarter ended April 2, 1999, File No. 1-7598).
10.2†	Form of Registrant's Change in Control Agreement for Chief Executive Officer (incorporated by reference to Exhibit 10.2 to the Registrant's Form 10-K Annual Report for the year ended October 2, 2015, File No. 1-7598).
10.3†	Form of Registrant's Change in Control Agreement for Senior Executives (Chief Financial Officer and General Counsel)(incorporated by reference to Exhibit 10.3 to the Registrant's Form 10-K Annual Report for the year ended October 2, 2015, File No. 1-7598).
10.4†	Form of Registrant's Change in Control Agreement for Senior Executives (other than the Chief Executive Officer, the Chief Financial Officer, and the General Counsel) (incorporated by reference to Exhibit 10.4 to the Registrant's Form 10-K Annual Report for the year ended October 2, 2015, File No. 1-7598).
10.5†	Form of Registrant's Change in Control Agreement for Key Employees (incorporated by reference to Exhibit 10.5 to the Registrant's Form 10-K Annual Report for the year ended October 2, 2015, File No. 1-7598).
10.6	Amended and Restated Note Purchase and Private Shelf Agreement, dated as of April 2, 1999, between the Registrant and Prudential Insurance Company of America (certain exhibits and schedules omitted) (incorporated by reference to Exhibit No. 10.7 to the Registrant's Form 10-Q Quarterly Report for the quarter ended April 2, 1999, File No. 1-7598).
10.7	Employee Benefits Allocation Agreement, dated April 2, 1999, by and among Varian Associates, Inc. (which has been renamed Varian Medical Systems, Inc.), Varian, Inc. and Varian Semiconductor Equipment Associates, Inc. (incorporated by reference to Exhibit No. 99.1 to the Registrant's Form 8-K Current Report filed as of April 19, 1999, File No. 1-7598).
10.8	Intellectual Property Agreement, dated April 2, 1999, by and among Varian Associates, Inc. (which has been renamed Varian Medical Systems, Inc.), Varian, Inc. and Varian Semiconductor Equipment Associates, Inc.

	(incorporated by reference to Exhibit No. 99.2 to the Registrant's Form 8-K Current Report filed as of April 19, 1999, File No. 1-7598).
10.9	Tax Sharing Agreement, dated April 2, 1999, by and among Varian Associates, Inc. (which has been renamed Varian Medical Systems, Inc.), Varian, Inc. and Varian Semiconductor Equipment Associates, Inc. (incorporated by reference to Exhibit No. 99.3 to the Registrant's Form 8-K Current Report filed as of April 19, 1999, File No. 1-7598).
10.10†	Registrant's Frozen Deferred Compensation Plan (incorporated by reference to Exhibit No. 10.17 to the Registrant's Form 10-K Annual Report for the fiscal year ended September 29, 2000, File No. 1-7598).
10.11†	Registrant's Amended and Restated 2005 Deferred Compensation Plan (incorporated by reference to Exhibit No. 10.2 of the Registrant's Form 10-Q Quarterly Report for the quarter ended January 2, 2009, File No. 1-7598).

Exhibit Number	Description
10.12†	Registrant’s Management Incentive Plan (incorporated by reference to Exhibit 10.12 to the Registrant's Form 10-K Annual Report for the year ended October 2, 2015, File No. 1-7598).
10.13†	Registrant’s Retirement Plan (incorporated by reference to Exhibit No. 99.1 to the Registrant’s Registration Statement on Form S-8 filed on March 14, 2001, and amended June 20, 2001, Registration No. 333-57012).
10.14†	Registrant’s 2010 Employee Stock Purchase Plan (incorporated by reference to Exhibit No. 10.1 to the Registrant’s Form 10-Q Quarterly Report for the

	quarter ended April 2, 2010, File No. 1-7598).
10.15†*	Description of Certain Compensatory Arrangements between the Registrant and its Executive Officers and Directors as of November 18, 2016.
10.16†	Registrant's Second Amended and Restated 2005 Omnibus Stock Plan (incorporated by reference to Exhibit No. 10.1 to the Registrant's Form 10-Q Quarterly Report for the quarter ended March 30, 2007, File No. 1-7598).
10.17†	Amendment No. 3 to the Registrant's Second Amended and Restated 2005 Omnibus Stock Plan (incorporated by reference to Exhibit No. 10.4 to the Registrant's Form 10-Q Quarterly

	Report for the quarter ended April 3, 2009, File No. 1-7598).
10.18†	Form of Registrant's Nonqualified Stock Option Agreement under the Registrant's Second Amended and Restated 2005 Omnibus Stock Plan (effective for nonqualified stock option awards) (incorporated by reference to Exhibit No. 10.22 to the Registrant's Form 10-K Annual Report for the fiscal year ended September 28, 2007, File No. 1-7598).
10.19†	Form of Registrant's Nonqualified Stock Option Agreement under the Registrant's Second Amended and Restated 2005 Omnibus Stock Plan (effective for nonqualified stock option awards granted

	to executive officers) (incorporated by reference to Exhibit No. 10.23 to the Registrant's Form 10-K Annual Report for the fiscal year ended September 28, 2007, File No. 1-7598).
10.20†	Form of Registrant's Nonqualified Stock Option Agreement under the Registrant's Second Amended and Restated 2005 Omnibus Stock Plan (effective for nonqualified stock option awards granted to non-employee directors) (incorporated by reference to Exhibit No. 10.24 to the Registrant's Form 10-K Annual Report for the fiscal year ended September 28, 2007, File No. 1-7598).
10.21†	Registrant's Third Amended and Restated 2005 Omnibus

	Stock Plan (incorporated by reference to Exhibit No. 10.1 to the Registrant's Form 10-Q Quarterly Report for the quarter ended March 30, 2012, File No. 1-7598).
10.22†	Form of Registrant's Nonqualified Stock Option Agreement under the Registrant's Third Amended and Restated 2005 Omnibus Stock Plan (incorporated by reference to Exhibit No. 10.2 to the Registrant's Form 10-Q Quarterly Report for the quarter ended March 30, 2012, File No. 1-7598).
10.23†	Form of Registrant's Nonqualified Stock Option Agreement under the Registrant's Third Amended and Restated 2005 Omnibus Stock Plan (effective for nonqualified

	stock option awards granted to executive officers after November 8, 2015) (incorporated by reference to Exhibit No. 10.1 to the Registrant's Form 8-K Current Report filed as of November 12, 2015, File No. 1-7598).
10.24†	Form of Registrant's Non-Employee Director Nonqualified Stock Option Agreement under the Registrant's Third Amended and Restated 2005 Omnibus Stock Option Plan (incorporated by reference to Exhibit No. 10.3 to the Registrant's Form 10-Q Quarterly Report for the quarter ended March 30, 2012, File No. 1-7598).
10.25†	Form of Registrant's Non-Employee Director Nonqualified Stock Option

	Agreement (for use in Singapore) under the Registrant's Third Amended and Restated 2005 Omnibus Stock Plan (incorporated by reference to Exhibit 10.4 of the Registrant's Form 10-Q Quarterly Report for the quarter ended March 30, 2012, File No. 1-7598).
10.26†	Form of Registrant's Non-Employee Director Nonqualified Stock Option Agreement (for use outside of U.S. except for Singapore) under the Registrant's Third Amended and Restated 2005 Omnibus Stock Plan (incorporated by reference to Exhibit No. 10.26 to the Registrant's Form 10-K Annual Report for the year ended September 28, 2012, File No. 1-7598).

Exhibit Number	Description
10.27†	Form of Registrant's Restricted Stock Unit Agreement under the Registrant's Third Amended and Restated 2005 Omnibus Stock Plan (incorporated by reference to Exhibit No. 10.5 to the Registrant's Form 10-Q Quarterly Report for the quarter ended March 30, 2012, File No. 1-7598).
10.28†	Form of Registrant's Restricted Stock Unit Agreement under the Registrant's Third Amended and Restated 2005 Omnibus Stock Plan (effective for restricted stock unit awards granted to executive officers on or after October 1, 2013 and prior to November 9, 2015) (incorporated by reference to Exhibit No. 10.2 to the Registrant's Form 10-Q Quarterly Report for the quarter ended December 27, 2013, File No. 1-7598).
10.29†	

	Form of Registrant's Restricted Stock Unit Agreement under the Registrant's Third Amended and Restated 2005 Omnibus Stock Plan (effective for restricted stock unit awards granted to executive officers after November 8, 2015) (incorporated by reference to Exhibit No. 10.2 to the Registrant's Form 8-K Current Report filed as of November 12, 2015, File No. 1-7598).
10.30†	Form of Registrant's Performance Unit Agreement under the Registrant's Third Amended and Restated 2005 Omnibus Stock Plan (incorporated by reference to Exhibit 10.30 to the Registrant's Form 10-K Annual Report for the year ended October 2, 2015, File No. 1-7598).
10.31†	Form of Registrant's Performance Unit Agreement under the Registrant's Third Amended and Restated 2005 Omnibus Stock Plan (effective for performance unit awards granted to executive officers

	on or after October 1, 2013 and prior to November 9, 2015)(incorporated by reference to Exhibit 10.31 to the Registrant's Form 10-K Annual Report for the year ended October 2, 2015, File No. 1-7598).
10.32†	Form of Registrant’s Performance Unit Agreement under the Registrant’s Third Amended and Restated 2005 Omnibus Stock Plan (effective for performance unit awards granted to executive officers after November 8, 2015) (incorporated by reference to Exhibit No. 10.3 to the Registrant’s Form 8-K Current Report filed as of November 12, 2015, File No. 1-7598).
10.33†	Form of Registrant’s Grant Agreement for Deferred Stock Units under the Registrant’s Third Amended and Restated 2005 Omnibus Stock Plan (incorporated by reference to Exhibit No. 10.7 to the Registrant’s Form 10-Q Quarterly Report for the quarter ended March 30,

	2012, File No. 1-7598).
10.34†	Form of Registrant's Non-Employee Grant Agreement for Deferred Stock Units (for use in Singapore) under the Registrant's Third Amended and Restated 2005 Omnibus Stock Plan (incorporated by reference to Exhibit 10.8 of the Registrant's Form 10-Q Quarterly Report for the quarter ended March 30, 2012, File No. 1-7598).
10.35†	Form of Registrant's Non-Employee Grant Agreement for Deferred Stock Units (for use outside of U.S. except for Singapore) under the Registrant's Third Amended and Restated 2005 Omnibus Stock Plan (incorporated by reference to Exhibit No. 10.31 to the Registrant's Form 10-K Annual Report for the year ended September 28, 2012, File No. 1-7598).
10.36	Credit Agreement, dated as of August 27, 2013, among the Registrant, Bank of America, N.A., as

	Administrative Agent, Swing Line Lender and L/C Issuer and each lender from time to time party thereto (incorporated by reference to Exhibit No. 10.32 to the Registrant's Form 10-K Annual Report for the year ended September 26, 2014, File No. 1-7598).
10.37	Amendment No. 1, effective as of September 27, 2013, to the Credit Agreement, dated as of August 27, 2013, among the Registrant, Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer and each of the lenders signatory thereto (incorporated by reference to Exhibit No. 10.1 to the Registrant's Form 10-Q Quarterly Report for the quarter ended December 27, 2013, File No. 1-7598).
10.38	Loan and Security Agreement between California Proton Treatment Center, LLC, ORIX Capital Markets, LLC, ORIX Capital Markets, LLC, and Varian Medical

	Systems International AG, dated September 30, 2011 (incorporated by reference to Exhibit No. 10.44 to the Registrant's Form 10-K Annual Report for the fiscal year ended September 30, 2011, File No. 1-7598).
10.39	First Amendment to Loan and Security Agreement and Other Loan Documents among ORIX Capital Markets, LLC, California Proton Treatment Center, LLC and Jeffrey L. Bordox and James Thomson, dated as of October 25, 2013 (incorporated by reference to Exhibit 10.39 to the Registrant's Form 10-K Annual Report for the year ended October 2, 2015, File No. 1-7598).

Exhibit Number	Description
10.40	Second Amendment to Loan and Security Agreement and Other Loan Documents among ORIX Capital Markets, LLC, ORIX Capital Markets, LLC, and Varian Medical Systems International AG, dated as of June 10, 2014 (incorporated by reference to Exhibit 10.40 to the Registrant's Form 10-K Annual Report for the year ended October 2, 2015, File No. 1-7598).
10.41	Third Amendment to Loan and Security Agreement and Other Loan Documents And Amendment to Fee Deed of Trust and Leasehold Deed of Trust among ORIX Capital Markets, LLC, ORIX Capital Markets, LLC, Varian Medical Systems International AG, and JP Morgan Chase Bank, N.A., dated as of November 6, 2015 (incorporated by reference to Exhibit 10.41 to the Registrant's Form 10-K Annual Report for the year ended October 2, 2015, File No. 1-7598).
10.42	Revenue Sharing Agreement between ORIX Proton San Diego, LLC and Varian Medical Systems International AG, dated September 30, 2011 (incorporated by reference to Exhibit No. 10.45 to the Registrant’s Form 10-K Annual Report for the fiscal year ended September 30, 2011, File No. 1-7598).
10.43++	Loan and Security Agreement (Building Loan) dated as of July 15, 2015 by and among MM PROTON I, LLC, as Borrower; JPMORGAN CHASE BANK, N.A., as Administrative Agent and Collateral Agent; and the Lenders referenced therein. “Lenders” includes the Registrant (incorporated by reference to Exhibit 10.43 to the Registrant's Form 10-K/A filed as of August 18, 2016, File No. 1-7598).
10.44++	First Amendment to Loan and Security Agreement (Building Loan) dated as of August 5, 2015 by and among MM PROTON I, LLC, as Borrower; JPMORGAN CHASE BANK, N.A., as Administrative Agent and Collateral Agent; and the Lenders referenced therein. “Lenders” includes the Registrant (incorporated by reference to Exhibit 10.44 to the Registrant's Form 10-K/A filed as of August 18, 2016, File No. 1-7598).
10.45++	Loan and Security Agreement (Project Loan) dated as of July 15, 2015 by and among MM PROTON I, LLC, a Borrower; JPMORGAN CHASE BANK, N.A., as Administrative Agent and Collateral Agent, and the Lenders referenced therein (incorporated by reference to Exhibit 10.45 to the Registrant's Form 10-K/A filed as of August 18, 2016, File No. 1-7598). “Lenders” includes the Registrant.
10.46++	Amendment No. One to Loan and Security Agreement (Project Loan) dated as of July 31, 2015 by and among MM PROTON I, LLC, as Borrower; JPMORGAN CHASE BANK, N.A., as Administrative Agent and Collateral Agent, and the Lenders referenced therein. (incorporated by reference to Exhibit 10.46 to the Registrant's Form 10-K/A filed as of August 18, 2016, File No. 1-7598). “Lenders” includes the Registrant.
10.47†	Varex Imaging Corporation 2016 Deferred Compensation Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K Current Report filed as of October 4, 2016, File No. 1-7598).
10.48	Amendment No. 2, effective as of November 25, 2015, to the Credit Agreement, dated as of August 27, 2013, among the Registrant, Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer and each of the lenders signatory thereto (incorporated by reference to Exhibit 10.4 to the Registrant's Form 10-Q Quarterly Report for the quarter ended January 1, 2016, File No. 1-7598).
10.49	

	Amendment No. 3, effective as of March 29, 2016, to the Credit Agreement, dated as of August 27, 2013, among the Registrant, Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer and each of the lenders signatory thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Form 10-Q Quarterly Report for the quarter ended April 1, 2016, File No. 1-7598).
10.50*	Amendment No. 4, effective September 2, 2016, to the Credit Agreement, dated as of August 27, 2013, among the Registrant, Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer and each of the lenders signatory thereto.

Exhibit Number	Description
10.52	Assignment and Assumption Agreement, dated June 27, 2016, between Varian Medical Systems International AG, Deutsche Bank AG, London Branch and JPMorgan Chase Bank, N.A., as administrative agent under the Loan and Security Agreement (Project Loan), dated July 15, 2015, among MM Proton I, LLC, the lenders parties thereto, and JPMorgan Chase Bank, N.A., as administrative agent (incorporated by reference to Exhibit 10.2 to the Registrant's Form 10-Q Quarterly Report for the quarter ended July 1, 2016, File No. 1-7598). .
21*	List of Subsidiaries as of November 23, 2016.
23*	Consent of Independent Registered Public Accounting Firm.
31.1*	Chief Executive Officer Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act.
31.2*	Chief Financial Officer Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act.
32.1*	Certification pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
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

† Management contract or compensatory arrangement.

* Filed herewith

++ Confidential treatment has been granted as to certain portions of this exhibit pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

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