VARIAN MEDICAL SYSTEMS INC
Form 10-K
November 23, 2010
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended October 1, 2010

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	**94304-1030**
(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 x 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 x

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 x 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 x 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 x

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

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

As of April 2, 2010, 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 2, 2010) was approximately $6,071,051,905. Shares of Registrant s common stock held by the Registrant s executive officers and directors and by each entity that owned 5% 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 18, 2010, the number of shares of the Registrant s common stock outstanding was 118,985,831.

DOCUMENTS INCORPORATED BY REFERENCE

Definitive Proxy Statement for the Company s 2011 Annual Meeting of Stockholders Part III of this Form 10-K

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VARIAN MEDICAL SYSTEMS, INC.

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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. (we, our 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 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 products; growth drivers; future orders, revenues, backlog, earnings or other financial results; and any statements using the terms believe, expect, expectation, anticipate, can, should, would, could, estimate, appear, based on, may, intended, potential, and possible or similar statements are 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

General

We, Varian Medical Systems, Inc., are a Delaware corporation and were originally incorporated in 1948 as Varian Associates, Inc. In 1999, we transferred our instruments business to Varian, Inc. (VI), a wholly owned subsidiary, and transferred our semiconductor equipment business to Varian Semiconductor Equipment Associates, Inc. (VSEA), a wholly owned subsidiary. We retained the medical systems business, principally the sales and service of oncology products and the sales of x-ray tubes and imaging subsystems. On April 2, 1999, we spun off VI and VSEA, which resulted in a non-cash dividend to our stockholders and which we refer to as the Spin-offs in this Annual Report on Form 10-K. Immediately after the Spin-offs, we changed our name to Varian Medical Systems, Inc. We have been involved in the medical systems business since 1959. An Amended and Restated Distribution Agreement dated as of January 14, 1999 and other associated agreements govern our ongoing relationships with VI and VSEA. In May 2010, VI became a wholly owned subsidiary of Agilent Technologies Inc.

Overview

We are the world leader in the design, manufacture, sale and service of equipment and software products for treating cancer with radiotherapy, stereotactic radiosurgery and brachytherapy. We also design, manufacture, sell and service x-ray tubes for original equipment manufacturers (OEMs); replacement x-ray tubes; and flat panel digital image detectors for filmless x-ray imaging (commonly referred to as flat panel detectors or digital image detectors) in medical, dental, veterinary, scientific and industrial applications. We design, manufacture, sell and service linear accelerators, digital image detectors, image processing software and image detection products for security and inspection purposes. We also develop, design, manufacture, sell and service proton therapy products and systems for cancer treatment.

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Our mission is to explore and develop radiation technology that protects and saves lives and prevents harm. We seek to be a Partner for Life and to help save an additional 100,000 lives per year with our technology, products and services. To meet this challenge, we offer tools for fighting cancer, taking x-ray images and protecting ports and borders.

Oncology Systems designs, manufactures, sells and services hardware and software products for treating cancer. Our products include linear accelerators, brachytherapy afterloaders, treatment simulation and verification equipment and accessories; as well as information management, treatment planning and image processing software. Our products enable radiation oncology departments in hospitals and clinics to perform conventional radiotherapy treatments and offer advanced treatments such as fixed field intensity-modulated radiation therapy (IMRT), image-guided radiation therapy (IGRT), volumetric modulated arc therapy (VMAT), and stereotactic radiotherapy, as well as to treat patients using brachytherapy techniques, which involve temporarily implanting radioactive sources. Our products are also used by neurosurgeons to perform stereotactic radiosurgery. Our customers worldwide include university research and community hospitals, private and governmental institutions, healthcare agencies, doctors offices and cancer care clinics.

X-ray Products designs, manufactures and sells: (i) x-ray tubes for use in a range of applications, including computed tomography (CT) scanning, radiographic or fluoroscopic imaging, mammography, special procedures and industrial applications; and (ii) flat panel digital image detectors for filmless x-ray imaging (commonly referred to as flat panel detectors or digital image detectors). Our x-ray tubes and flat panel detectors are sold to large imaging system OEM customers that incorporate them into their medical diagnostic, dental, veterinary, IGRT and industrial imaging systems. For replacement purposes, our x-ray tubes and our flat panel detectors are sold to small OEMs, independent service companies and directly to end-users.

We have two other businesses and our Ginzton Technology Center (GTC) that we report together under the Other category. Our Security and Inspection Products (SIP) business designs, manufactures, sells and services Linatron® x-ray accelerators, imaging processing software and image detection products (including IntellX™) for security and inspection purposes, such as cargo screening at ports and borders and nondestructive examination in a variety of applications. We generally sell SIP products to OEMs who incorporate our products into their inspection systems.

Our Varian Particle Therapy business develops, designs, manufactures, sells and services products and systems for delivering proton therapy, another form of external beam radiation therapy using proton beams for the treatment of cancer. Our current focus is commercializing the proton therapy system and bringing our expertise in traditional radiation therapy to proton therapy to improve its clinical utility and to reduce its cost of treatment per patient.

The GTC develops technologies that enhance our 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, including security and cargo screening.

In September 2008, we approved a plan to sell the scientific research instruments business (Research Instruments) that we acquired as part of our acquisition of ACCEL Instruments GmbH (ACCEL, which has since changed its name to Varian Medical Systems Particle Therapy GmbH) in order to focus our efforts on the development of the proton therapy systems portion of the business. The sale of Research Instruments was completed in the second quarter of fiscal year 2009. Research Instruments is classified as a discontinued operation. For additional information, see Discontinued Operations below.

Our business is subject to various risks and uncertainties. You should carefully consider the factors described in 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.

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Radiation Therapy and the Cancer-Care Market

Radiation therapy, also referred to as radiotherapy, is the use of certain types of focused energy (radiation) to kill cancer cells and shrink tumors, with the goal of damaging as many cancer cells as possible, while limiting harm to nearby healthy tissue. Radiotherapy is commonly used either alone or in combination with surgery or chemotherapy. 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 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 comprises a physician specializing in radiation oncology, a physicist for planning the treatment and a radiation therapist for 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 linear accelerator generates the x-ray beams and administers the treatment by rotating around a patient lying on a treatment couch and delivering the x-ray beam to the tumor from different angles in order to concentrate 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 radiation 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, intensity and angle of the radiation beams from a linear accelerator are varied, or modulated, across the target area. This form of radiotherapy conforms the radiation beams more closely to the shape of the tumor and allows physicians to deliver higher doses of radiation than conventional radiation, while more effectively limiting the amount of radiation delivered to nearby healthy tissue. In this way, clinicians can design and administer an individualized treatment plan for each patient, targeting the tumor as closely as a few 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 additional treatment centers, from university hospitals to local community clinics, adopt IMRT for their treatments every year. We are a leading global provider of products that enable IMRT for the treatment of cancer.

IGRT is another advanced form of external beam radiotherapy complementing IMRT to enhance treatments. While IMRT helps physicians shape the beam to the tumor, IGRT goes further in allowing physicians to accommodate for a tumor moving or shrinking. This allows the delivery of even higher doses of radiation to tumors with the goal of sparing even more of the surrounding healthy tissue. IGRT technologies compensate for daily changes and movements in tumors and enable dynamic, real-time visualization and precise treatment of small, moving and changing tumors with greater intensity and accuracy. With the greater precision offered by IGRT, clinics and hospitals are potentially able to improve outcomes by concentrating even still higher doses of radiation at the tumors. We believe IGRT has become an accepted standard for treatment in the radiation oncology market.

Stereotactic radiosurgery (also referred to as stereotactic body radiotherapy) is an advanced radiation treatment procedure that employs linear accelerators and IMRT/IGRT technology to deliver a small number of very precisely placed, high dose beams of radiation to eradicate cancerous, non-cancerous and abnormal lesions in the body. Radiation therapists and surgeons are recognizing stereotactic radiosurgery as a useful tool in curative radiation therapy.

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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. VMAT enables improved treatment precision by sparing more healthy tissue, makes treatments faster and offers the possibility of greater comfort for patients. 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 can mean greater comfort since treatments often involve the patient being immobilized on the treatment couch. 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 to more patients.

An alternative to external beam radiotherapy, brachytherapy involves the insertion of radioactive seeds, wires or ribbons directly into a tumor or into a body cavity close to the cancerous area. These techniques, unlike external beam radiation therapy, tend to result in much less irradiation 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 accuracy 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 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 the high capital cost and the market is still developing. We have entered the proton therapy market because we believe we can apply our experience in traditional radiotherapy to proton therapy, reducing 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. The number of new cancer cases diagnosed annually is projected to increase by more than 65 percent from 12.7 million new cases in 2008 to more than 21.3 million in 2030, according to the International Agency for Research on Cancer (the IARC) in the World Health Organization. The IARC s World Cancer Report predicts that the increase in new cases will mainly be due to steadily aging populations in both developed and developing countries. 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 match new, higher standards of care.

The rise in cancer cases, together with the increase in sophistication of new treatment processes, 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

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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, stereotactic radiotherapy, stereotactic radiosurgery, brachytherapy and, ultimately, proton therapy), and developing technology and equipment that enable treatments (such as VMAT) which 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. Several nations with growing economies, including China, India, and Brazil, are beginning to invest in expanding their radiation oncology capability to address the needs of their growing and aging populations. As an example, China, India and Brazil are estimated to have less than one linear accelerator per million people in their population. By comparison, the U.S. has an estimated 13 linear accelerators per million people in its population. This capacity shortfall, coupled with ever increasing incidences of cancer, represent additional drivers for our continued growth in international markets. 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 weaker U.S. dollar against foreign currencies would make our product pricing more competitive in the local currencies of our international customers. A weaker U.S dollar against foreign currencies would also benefit our international revenues and net orders when measured in U.S. dollars.

In fiscal year 2009, all of our businesses were negatively impacted by the economic downturn. In Oncology Systems, the economic downturn shrunk customer capital equipment budgets, slowed decision making and made financing more expensive and time consuming. Our X-ray Products business saw weak net orders and revenues as a result of customer inventory reduction efforts. We saw governments postpone purchasing decisions and delay deployments of products for security and inspection systems. In addition, Oncology Systems was negatively impacted in fiscal year 2009 by the uncertainties created by the prospects of healthcare reform in the United States and by proposed reductions in Medicare reimbursement rates for radiotherapy and radiosurgery at free-standing clinics in the United States. We believe we successfully navigated within a tough environment in fiscal year 2010 and, by the end of the fiscal year, there was greater clarity on these issues, including, for fiscal year 2011, the reimbursement rates for radiotherapy and radiosurgery at free-standing clinics.

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, IMRT, IGRT, VMAT, stereotactic radiotherapy, stereotactic radiosurgery 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; treatment planning software; treatment simulation and verification equipment and accessories and quality assurance software for simulating and verifying the treatment plans before treatment and verifying that a treatment was delivered correctly afterwards; and information management software for recording the history and results of treatments and other patient treatment information and data, including patient x-ray images.

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, comfort to the patient 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, clinically 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.

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Additionally, the precision and versatility of our products and technology makes 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 to share equipment, resources and information in a more 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.

Linear accelerators are the core device for delivering conventional external beam radiotherapy with IMRT, IGRT and VMAT treatments, and we produce versions of these devices to suit various requirements. Our Clinac® medical linear accelerators are used to treat cancer by producing therapeutic electrons and x-ray beams that target tumors and other abnormalities. The Clinac iX linear accelerators 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, ultra-precise device with a faster dose delivery rate and smaller isocenter compared to the Clinac iX. Trilogy was developed with IGRT and stereotactic radiotherapy in mind, but is also capable of delivering conventional, 3D conformal radiotherapy, IMRT and VMAT. Trilogy has the precision necessary to deliver stereotactic radiosurgery for neurosurgical treatments and is the accelerator that is at the core of the Novalis Tx™ product offering, a combination of products from Varian and Brainlab AG (Brainlab), targeted to neurosurgeons. The UNIQUE™ low-energy linear accelerator, which was developed to address more price sensitive markets in international regions, is capable of integrating our accessory products (including RapidArc) to deliver IMRT, IGRT and VMAT. In the second quarter of fiscal year 2010, we introduced the TrueBeam system for image-guided radiotherapy and radiosurgery. This product line is a fully-integrated system designed from the ground up to treat a moving target with higher speed and accuracy. Including a small portion of TrueBeam orders representing upgrades from other linear accelerators already in our backlog, through October 1, 2010 we had received orders for more than 125 TrueBeam systems since its introduction, with the majority of the orders coming from North America.

We also manufacture and market linear accelerator accessories that enhance efficiency and enable delivery of advanced treatments such as IMRT, IGRT, stereotactic radiotherapy, stereotactic radiosurgery and VMAT. 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 the course of treatment.

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 a cone-beam computerized tomography (CBCT) imaging software accessory that works with the OBI 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. Therefore, 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 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

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products enable faster delivery of radiation treatment with the possibility of greater comfort to the patient, reduced opportunity for tumor movement during treatment and greater patient throughput, resulting in lower cost per patient for the hospital or clinic. 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. We believe RapidArc represents a significant advancement in IMRT cancer treatment and can help drive longer term demand for our linear accelerators and IMRT-related accessories.

Our treatment planning and information management 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. Prior to any treatment, particularly IMRT, IGRT, stereotactic radiosurgery or one using RapidArc, physicians must plan the course of radiation delivery for the patient. We offer a range of treatment planning products that assist physicians in compiling 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.

Our Argus software manages the planning, recording and analysis of quality assurance data for linear accelerators. Finally, our ARIA Oncology Information Management System (ARIA) 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.

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. With General Electric Medical Systems (GE) in North America, we have established the See and Treat Cancer Care program for radiation therapy that allows us to offer a suite of diagnostic and cancer treatment tools combining our comprehensive set of radiation therapy products with GE s advanced diagnostic imaging systems. We have also established a strategic relationship with Brainlab for the sale and marketing of a radiosurgical suite of products targeted to neurosurgeons that integrates either our Trilogy Tx linear accelerator or our TrueBeam STx and our HD 120 multi-leaf collimator with specialty positioning and software products offered by Brainlab, called the Novalis Radiosurgery Program. We have a 2.5% equity ownership in Brainlab.

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 HDR prostate treatment planning.

Revenues from our Oncology Systems business segment represented 79%, 81% and 81% of total revenues for fiscal years 2010, 2009 and 2008, respectively. Our Oncology Systems business segment revenues also include service revenues. See Customer Services and Support. For a discussion of

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Oncology Systems business segment financial information, see Note 14, Segment Information of the Notes to the Consolidated Financial Statements.

X-ray Products

Our X-ray Products business segment is a world leader in designing and manufacturing x-ray tubes and flat panel detectors, which are key components of x-ray imaging systems. We sell our products to OEMs for new system configurations and replacement x-ray tubes 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 found broad application as an alternative to image intensifier tubes and x-ray film. These flat panel detectors 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 and suffers less degradation over time than image intensifier tubes and is more cost effective than x-ray film. Our product offering of flat panel detectors also includes a family of radiographic panels, which may be used on digital radiography systems or may be used to convert film-based systems to digital systems.

Our radiographic flat panels were a key contributor to net order and revenue growth for X-ray Products in fiscal years 2010 and 2009. Revenues from X-ray Products represented 17%, 15% and 15% of total revenues in fiscal years 2010, 2009 and 2008. For a discussion of the X-ray Products business segment financial information, see Note 14, Segment Information of the Notes to the Consolidated Financial Statements.

Other

Our SIP business 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 M-i 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, the solid rocket boosters on NASA s Space Shuttle. IntellX is an imaging product for cargo screening.

Generally, we sell our SIP products to OEMs who incorporate our products into their inspection systems, which are then sold to customs and other government agencies who use them in overseas ports and borders to screen for contraband, weapons, stowaways, narcotics and explosives, as well as for manifest verification. We also sell our SIP products to commercial organizations 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 Varian Particle Therapy 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. 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

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has been in clinical use for more than four decades, it has not been widely deployed due to high capital cost.

GTC, our scientific research facility, continues to invest in developing technologies that enhance our current businesses or 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 is developing 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.

SIP, Varian Particle Therapy and GTC report their results from operations as part of the Other category. Combined revenues from these operations represented 4% of total revenues in each of fiscal years 2010, 2009 and 2008. For a discussion of segment financial information, see Note 14, Segment Information of the Notes to the Consolidated Financial Statements.

Customer Services and Support

We maintain service centers in Milpitas, California; Las Vegas, Nevada; Marietta, Georgia; Buc, France; Crawley, United Kingdom; Zug, Switzerland; Herlev (Copenhagen), Denmark; Diegem (Brussels), Belgium; Darmstadt, Germany; Houten, The Netherlands; Alcobendas (Madrid), Spain; Cernusco (Milan), Italy; Manama, Bahrain; Moscow, Russia; Mumbai, Delhi, and Chennai, India; Tokyo, Osaka, Sendai, Nagoya, and Fukuoka, Japan; Beijing, Shanghai and Hong Kong, China; Kuala Lumpur, Malaysia; Singapore; Bangkok, Thailand; Belrose, Australia; and Sao Paulo, Brazil; as well as field service personnel throughout the world for Oncology Systems customer support services. Key Oncology Systems logistics and education operations are located in Las Vegas, Nevada, Beijing, China, Mumbai, India, and Zug, Switzerland. Our network of service engineers and customer support specialists provide installation, warranty, repair, training and support services, and professional services. We generate service revenues by providing services to customers on a time-and-materials basis and through 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 dealers and/or agents in a few foreign countries. Customers can access our extensive service network by calling any of our service centers.

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.

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 x-ray tubes and flat panel detector products in our X-ray Products business segment for 12 to 24 months, although for some x-ray tubes the warranty period is based on the number of times the product is used. We provide technical advice and consultation for x-ray tubes and imaging subsystems products to major OEM customers from our offices in Salt Lake City, Utah; Charleston, South Carolina; Tokyo, Japan; Beijing, China and Willich, Germany. 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 to meet the technical support requirements of independent tube installers that use our x-ray tube and flat panel detector products.

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We generally warrant our SIP products for 12 months. We provide technical support and service for these products to major OEM customers from our offices in Las Vegas, Nevada; Lincolnshire, Illinois; and Buc, France; Manama, Kingdom of Bahrain; Crawley, United Kingdom; Milano, Italy; and Brussels, Belgium. We use the Oncology Systems Customer Support Services organization in Asia, Australia and South America.

In the Varian Particle Therapy business, we sell our proton therapy equipment generally with a 12-month warranty. We also provide on-site technical support and service for our proton therapy equipment.

Marketing and Sales

We employ a combination of direct sales forces and independent distributors or resellers in North America, Europe, Australia and major parts of Asia and Latin America for the marketing and sales of our products worldwide. In fiscal years 2010, 2009 and 2008, we did not have a single customer that represented 10% or more of our total revenues.

For our Oncology Systems segment, we sell direct in North America and use a combination of direct sales and independent distributors in international regions. We also have direct-to-consumer advertising campaigns to increase consumer awareness of Oncology Systems products. 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. 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. Our customers frequently fix capital budgets one or more years in advance.

In addition, we have seen customers decision-making process further complicated and lengthened, especially in the United States, during the economic downturn, 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 and the general constriction in credit availability. While the economic downturn has primarily affected our business in North America, other economic turmoil, such as the banking and currency instability in Greece and other European countries, may negatively affect our international business. In addition, we believe that the economic downturn had 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 had 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 order to revenue conversion cycle could reduce our revenues and margins. In addition, our receivables may take longer to collect.

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 had seen our customers decision-making process complicated when there was uncertainty surrounding Medicare reimbursement rates for radiotherapy and radiosurgery in the United States, such as in 2009 when there were proposed reductions in Medicare reimbursement rates for radiotherapy and radiosurgery at free-standing clinics. In addition, we are also unable to determine the impact of the recently enacted Affordable Health Care for America Act on long-term growth or demand for our products and services. International reimbursement rates for radiation therapy tend to be low in national health systems, yet

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international markets continue to invest in better treatment capability, albeit often after it has been proven in the North American region or in other leading research centers worldwide.

Total Oncology Systems revenues, including service revenues, were $1.9 billion, $1.8 billion and $1.7 billion for fiscal years 2010, 2009 and 2008, respectively. We divide our market segments for Oncology Systems revenues into North America, Europe, Asia and rest of the world, and these regions constituted 46%, 33%, 17% and 4%, respectively, of Oncology Systems revenues during fiscal year 2010; 54%, 29%, 14%, and 3%, respectively, of Oncology Systems revenues during fiscal year 2009; and 52%, 31%, 12% and 5%, respectively, of Oncology Systems revenues during fiscal year 2008.

Our X-ray Products segment employs a combination of direct sales and independent distributors for sales in all of its regions and sells a high proportion of its products to a limited number of OEMs that incorporate our products into their imaging systems. The fundamental growth driver of this business segment is the on-going success of our key customers, and we expect that revenues from relatively few customers will continue to account for a high percentage of X-ray Products revenues in the foreseeable future. Our OEM customers include Toshiba Corporation, Carestream Health, Inc., Hitachi Medical Corporation, Imaging Sciences International, Inc., Philips Medical Systems, GE Healthcare and Sound Technologies, Inc. These OEM customers represented 62%, 60%, and 62% of our total X-ray Products segment revenues during fiscal years 2010, 2009 and 2008, respectively, with the remaining revenues coming from a large number of small OEMs and independent services companies. If reimbursement for or access to diagnostic radiology is affected by the Affordable Health Care for America Act and similar state proposals, this will also likely affect demand for our X-Ray products.

Total revenues for our X-ray Products segment were $403 million, $331 million and $305 million for fiscal years 2010, 2009 and 2008, respectively. We divide our market segments for X-ray Products revenues by region into North America, Europe, Asia and rest of the world, and these regions constituted 32%, 17%, 50% and 1%, respectively, of X-ray Products revenues during fiscal year 2010; 33%, 15%, 49% and 3%, respectively, of X-ray Products revenues during fiscal year 2009 and 35%, 15%, 47% and 3%, respectively, of X-ray Products revenues during fiscal year 2008.

Our SIP business also uses a combination of direct sales and independent distributors and sells a high proportion of its products to a limited number of OEMs that incorporate our products into their systems. As with X-ray Products, this business depends on the success of our OEM customers, and we expect that revenues from relatively few customers will continue to account for a high percentage of SIP revenues in the foreseeable future. We supply Linatron linear accelerators and detector products to OEMs such as Smiths Detection, Rapiscan Systems, Inc., American Science & Engineering, Inc. and L-3 Communications. We also sell our SIP products to commercial organizations in the casting, power, aerospace, chemical, petro-chemical and automotive industries.

Use of our SIP technology in security cargo screening and border protection is still in its early stages, but we believe demand for our SIP products will be driven primarily by cargo screening and border protection needs. This business is heavily influenced by governmental policies on homeland security, political change and government budgets. Orders and revenues for our SIP 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 any orders for a long time period thereafter. Furthermore, bid awards in this business may be subject to challenge by third parties, as we have recently encountered with a large government project, which can make the certainty of some SIP orders unpredictable. In the fourth quarter of fiscal year 2010, we restructured this business and recorded a $2 million restructuring charge to bring costs in line with actual business activity.

In the Varian Particle Therapy business, we use direct sales specialist representatives who collaborate globally with our Oncology Systems sales group on projects. Potential customers are government-sponsored hospitals and research institutions and research universities, which typically purchase products through public tenders, and, to a lesser extent, private hospitals, clinics and private developers. While

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this market is still developing, we believe that growth in this business will initially develop 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.

Proton therapy facilities are large-scale construction projects that are time consuming; involve significant customer investment and often complex project financing. Consequently, this business is vulnerable to general economic and market conditions. Customer decision-making cycles tend to be very long, and orders generally involve many contingencies. As with our SIP business, bid awards in this business may be subject to challenge by third parties. We are investing substantial resources to commercialize this technology and to build this new business. We currently have one proton therapy system being commissioned at a customer facility in Munich, Germany and, as of the end of fiscal year 2010, three of the four treatment gantries at the facility were treating patients. We currently have a Conformité Européenne (CE) mark to market our proton therapy systems within the European Economic Area (EEA).

Competition

Rapidly evolving technology, intense competition and pricing pressure characterize the markets for radiation therapy equipment and software products, including our Oncology Systems products. We compete with companies worldwide. Some of our competitors have greater financial, marketing and other resources than we have. 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. 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 will enter our markets, as we encountered new competitors enter new markets such as stereotactic radiosurgery, VMAT and proton therapy. We have directed substantial product development efforts into (i) greater 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 emphasized maintaining an open systems approach that allows customers to mix and match individual products, incorporate products from other manufacturers, share information with other systems and use the equipment for offering various methods of radiation therapy. We anticipate that these efforts will increase the acceptance and adoption of IMRT, VMAT and IGRT and will stimulate demand for our products from new customers and upgrades from existing customers. We face competition though from closed-ended dedicated-use systems 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 enable greater interconnectivity, enhance ease-of-use and reduce setup and treatment times, our financial results 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, long-term relationship with customers and capabilities of customers existing equipment. We believe we compete favorably with our competitors based upon our strategy of providing a complete package of products and services in the field of radiation oncology and our continued commitment to global distribution and customer service, value-added manufacturing, technological leadership and new product innovation. To complete 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 to do so ahead of our competitors. As our Oncology Systems products are generally sold on a basis of total value to 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. In addition, additional competitors may

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delay customer purchasing decisions as customers evaluate the products of these competitors along with ours, potentially extending our sales cycle and adversely affect our net orders.

We are the leading provider of medical linear accelerators and related accessories. In radiotherapy and radiosurgery markets, we compete primarily with Elekta AB, Siemens Medical Solutions, Tomotherapy Incorporated and Accuray Incorporated. With our information and image management, simulation, treatment planning and radiosurgery products, we also compete with a variety of companies, such as Elekta AB, Philips Medical Systems, Best Theratronics, Ltd., Nucletron B.V. and Siemens Medical Solutions. We also encounter some competition from providers of hospital information systems. With respect to our brachytherapy operations, our competitors are Nucletron B.V. and IBt Bebig s.a. For the service and maintenance business for our Oncology Systems products, 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 alternative cancer treatment methods, such as traditional surgery, chemotherapy, robotic surgery and drug therapies, among others. To compete successfully, we need to demonstrate and convince our customers of the advantages of radiation therapy over other cancer treatment alternatives.

In x-ray imaging components and subsystems, 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. As a result, we must have 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 OEMs such as Toshiba Corporation, Hitachi Medical Corporation, Philips Medical Systems and GE Healthcare, all of which 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. 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 to a number of OEMs, 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. For flat panel detectors, our significant customers include Carestream Health, Inc., Toshiba Corporation and Imaging Sciences International Inc., and we primarily compete against Perkin-Elmer, Inc., Trixell S.A.S., Samsung Electronics and Canon, Inc.

In our SIP business, we compete with other OEM suppliers, primarily outside of the United States in the security and inspection market, and our major competitor is Nuctech Company Limited. The market for our SIP products used for nondestructive testing in industrial applications is small and highly fractured and there is no single major competitor in this nondestructive testing market.

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 complete the development of our commercial proton therapy system, lower our product costs, 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 OBI. In the proton therapy market, we compete principally with Ion Beam Applications S.A., Hitachi Medical Corporation and Still River Systems, Inc.

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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 $157 million, $147 million and $136 million in fiscal years 2010, 2009 and 2008, 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. Present 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 is also pursuing 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. In addition, GTC is investigating 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 and India. 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. Much of the Oncology Systems development efforts relate to our next generation linear accelerators; enhancements to IGRT and IMRT; our Monte Carlo and dose calculation algorithms for our treatment planning software products; and our new electronic health records within our information management software.

Within X-ray Products, development is conducted at our Salt Lake City, Utah and Mountain View, California facilities and is primarily focused on developing and improving x-ray imaging component and subsystem products. 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 x-ray tubes to enhance the performance of our flat panel detectors. Research in flat panel imaging technology is aimed at developing new panel technologies for low cost radiographic imaging, flexible panel interfaces and cone beam CT.

Within Varian Particle Therapy, our development efforts focus on productization of proton accelerators, reducing space requirement and cost in the treatment delivery room through the development of innovative patient positioning and motion management technology. We expect that, in order to realize the full potential of the Varian Particle Therapy business, we will need to invest substantial resources to properly develop and commercialize proton therapy technology and build this new business.

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

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Charlottesville, Virginia. Our SIP linear accelerators and certain radiographic products are manufactured in Las Vegas, Nevada, and Lincolnshire, Illinois, respectively. We manufacture components and sub-systems for our proton therapy products and systems in Troisdorf, Germany and we plan to develop additional manufacturing facilities as needed for this business. We manufacture our x-ray imaging component and subsystem and flat panel detector products in Salt Lake City, Utah; Charleston, South Carolina; Willich, Germany; and Bejing, 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. Except for the Lincolnshire, Illinois and Winnipeg, Canada facilities, these manufacturing facilities are certified by International Standards Organization (ISO) under ISO 9001 (for SIP) 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 material, purchased parts and assemblies through on-line inspection. We also receive subassemblies from third-party suppliers and integrate them into a finished system. We outsource the manufacturing of many major subassemblies and perform system design, assembly and testing in-house. We believe outsourcing enables us to reduce 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 and specialized integrated circuits, x-ray tube targets, housings, glassframes and various other x-ray tube components. We require certain raw materials such as tungsten, lead and copper for Oncology Systems and SIP; copper, lead, tungsten, rhenium, molybdenum zirconium, and various high grades of steel alloy for X-ray Products, and high-grade steel, high-grade copper and iron for the Varian Particle Therapy 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.

Backlog

Our backlog at the end of fiscal year 2010 was $2.2 billion, of which we expect to recognize approximately 50% to 55% as revenues in fiscal year 2011. Including a $62 million proton therapy system order from Skandion Kliniken that was subsequently cancelled, our backlog at the end of fiscal year 2009 was $2.1 billion, of which $1.1 billion was recognized as revenues in fiscal year 2010. Our Oncology Systems backlog represented 91% and 87% of the total backlog at the end of fiscal years 2010 and 2009, respectively. Except for Varian Particle Therapy orders, we only recognize orders when product shipment or construction of certain highly customized SIP products is expected to occur within two years and only if any contingencies are deemed perfunctory. In addition, we do not recognize SIP orders from governmental agencies with bid protest provisions until the expiration of the bid protest period. For our Varian Particle Therapy business, we recognize orders when construction of the related proton therapy treatment center is reasonably expected to start within two years. Also, we only recognize orders for Varian Particle Therapy products with contingencies if we deem the contingencies perfunctory or if we publicly disclose the existence and nature of material contingencies. However, orders will not be recognized if there are major financing contingencies or customer board approval contingencies pending. Backlog also includes a small portion of service contracts when they become billable, as well as the amount of deferred revenue and revenue related to acceptance. We perform a semi-annual review to verify that orders in our backlog remain valid. This review identifies aged orders and confirms these orders with our internal sales organization or our customers. Aged orders which are not expected to be converted to revenues during this backlog review are deemed dormant and are no longer included in the

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reported backlog. 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. In fiscal years 2010, 2009 and 2008, we reversed $124 million (which includes the cancellation of the $62 million proton therapy system order), $71 million and $70 million, respectively, of orders due to adjustments, revisions or cancellations. Our reported net orders included all backlog reversals.

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; other situations where people may come in contact with radiation (for example, when our SIP 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 diagnosing 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 facility that ultimately result in the delivery of radiation to patients. Human and other errors or accidents may arise from the fact that our products operate in complex environments with products from other vendors, where interoperability or data sharing protocol may not be optimized even though the equipment or system operate 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, or their misuse or failure, as well as liability related to the loss or misuse of private patient data. 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 installation, servicing and support of our products. With any accident or mistreatment, we could be subject to legal costs, adverse publicity and damage to our reputation, whether or not our products or services were a factor. In addition, if a product we designed or manufactured were defective (whether due to design, labeling or manufacturing defects, improper use of the product or other reasons), we may be required to recall the product and notify regulatory authorities. We maintain limited product liability insurance coverage and currently self-insure professional liability/errors and omissions liability.

Government Regulation

U.S. Regulation

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 Food and Drug Administration (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. 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, 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 Varian Particle Therapy business, constitute medical devices subject to these regulations. Our x-ray tube products and flat panel detectors produced by X-ray Products are also considered medical devices. Future products in any of our business segments may constitute medical devices and be subject to regulation. These laws require that

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manufacturers adhere to certain standards designed to ensure that the medical devices are safe and effective. Under the FDC Act, each medical device manufacturer must comply with requirements applicable to good manufacturing practices.

Our manufacturing operations for medical devices are required to comply with the FDA s Quality System Regulation (QSR), which addresses a company s responsibility for quality systems, the requirements of good manufacturing practices and relate to 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 FDA clearance or approval to market new and existing products. Among other things, these regulations require that manufacturers establish performance requirements before production. The FDA makes announced and unannounced inspections of medical device manufacturers and may issue reports, known as Form FDA 483 reports (listing instances where the manufacturer has failed to comply with applicable regulations and/or procedures), or Warning Letters citing failure to comply with applicable regulations or procedures which, if not adequately responded to, could result in the FDA bringing enforcement action against us, including criminal and civil fines and total shutdown of production facilities and criminal prosecution. Inspections usually occur every two years.

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 medical device obtain either 510(k) pre market notification clearance or pre market approval (PMA) before the manufacturer can market and sell those products in the United States. For proton therapy systems, a 510(k) pre market notification clearance is required prior to the system being used for treating patients. The 510(k) clearance process is applicable when the new product being developed is substantially equivalent to a legally marketed device. The process of obtaining 510(k) clearance generally takes at least one to three months from the date the application is filed and generally requires submitting supporting design and testing data, which can be extensive and can lengthen the process considerably beyond three months. After a product receives 510(k) clearance, any modifications or enhancements 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. 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 must generally conduct at least one clinical protocol and submit extensive supporting data and clinical information in the PMA application to prove the safety and effectiveness of the product. This process typically takes at least one to two years from the date the pre-market approval is accepted for filing, but can take longer for the FDA to review. To date, we have produced Class 1 medical devices, which require no pre-market approvals or clearances, and Class 2 medical devices, which require only 510(k) clearance. Our x-ray tubes and flat panel detectors are Class 1 medical devices, while all of the products produced by our Oncology Systems segment and the proton therapy systems manufactured by our Varian Particle Therapy business are Class 2 medical devices.

The FDA and the Federal Trade Commission (FTC) also regulate the advertising of our products to ensure that the claims we make are consistent with our regulatory clearances, that there are scientific data to substantiate the claims and that our advertising is neither false nor misleading. In general, 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.

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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 by-product material requires a specific radioactive material license. Manufacture and distribution of these radioactive sources and devices also must be in accordance with an approved NRC certificate, or an Agreement State registration certificate. 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 MD&A Environmental Remediation Liabilities.

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

- adverse publicity affecting both us and our customers;
- increased pressure from our competitors;
- investigations or Warning Letters;
- fines, injunctions, and civil penalties;
- partial suspensions or total shutdown of production facilities, or the imposition of operating restrictions;
- losses of clearances or approvals already granted, or the refusal of future requests for clearance or approval;
- seizures or recalls of our products or those of our customers;
- the inability to sell our products;
- difficulty in obtaining product liability or operating insurance at a reasonable cost, or at all; and
- criminal prosecutions.

Other applicable 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, including the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and similar laws and regulations in foreign countries covering data privacy and other protection of health and employee information, fraud and abuse laws and regulations, including, physician self-referral prohibitions, anti-kickback laws 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, HIPAA was recently amended by the Health Information Technology for

Economic and Clinical Health Act (the HITECH Act), enacted as part of the American Recovery and Reinvestment Act of 2009. The HITECH Act significantly increases the civil money penalties for violations of patient privacy rights protected under HIPAA. Furthermore, 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

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recent years, both in the United States and internationally, toward more stringent regulation and enforcement of requirements applicable to medical device manufacturers and requirements regarding protection and confidentiality of personal data.

Medicare and Medicaid Reimbursement

The federal and state governments of the U.S. 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. We have seen our customers decision-making process complicated by the uncertainty surrounding Medicare reimbursement rates for radiotherapy and radiosurgery in the United States. In recent years, we have also seen dramatic reductions in Medicare reimbursements for diagnostic radiology. We believe reductions in these Medicare reimbursement rates have reduced demand for medical x-ray imaging equipment, such as CT scanners, which have negatively impacted demand for our x-ray tube and flat panel detector products. 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 Balanced Budget Act of 1997 revised the Medicaid program to give each state more control over coverage and payment issues. In addition, the U.S. Centers for Medicare and Medicaid Services (CMS) has granted many states waivers to allow for greater control of the Medicaid program at the state level. The impact on our business of this greater state control on Medicaid payment for diagnostic services remains uncertain.

We are continuing to evaluate the recently enacted Affordable Health Care for America Act. Specifically, one of the components of the new law is a 2.3% excise tax on sales of most medical devices, which include our Oncology Systems products, starting in 2013. This tax may put increased pressure on medical device manufacturers and purchasers, and may lead our customers to reduce their orders for products we produce or to request that we reduce the prices we charge for our products in order to offset the tax. Other elements of this new 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.

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 business, and we expect that this uncertainty will persist until there is greater clarity on how the Affordable Health Care for America Act and state proposals will affect healthcare providers.

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

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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 Regulation

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. 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. We rely in some countries on our foreign distributors to assist us in complying with foreign regulatory requirements.

The European Union (EU) implemented a medical device directive that requires us to affix the CE mark to our products in order to sell them in member countries of the EU. 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 EU. The CE mark is also recognized in many countries outside the EU, such as 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 directives. The ISO promulgates standards for certification of quality assurance operations. We are certified as complying with the ISO 9001 for our SIP 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 MD&A Critical Accounting

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Estimates and Environmental Remediation Liabilities. Also, many countries where we sell our products have legislation protecting the confidentiality of personal information and the circumstances under which such information may be released for inclusion in our databases, or released to third parties.

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 October 1, 2010, we owned 267 patents issued in the United States and 74 patents issued throughout the rest of the world and had 341 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 Government Regulation Foreign Regulation and MD&A Environmental Remediation Liabilities, which discussions are incorporated herein by reference.

Financial Information about Geographic Areas

We do business globally with manufacturing in the United States, Europe and China and with sales and service operations and customers throughout the world. Roughly half of our revenues are generated from our international regions. In addition to the potentially adverse impact of foreign regulations, see Government Regulation Foreign Regulation, 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). So 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 foreign currency exchange rates, which may affect both the affordability and competitiveness of our products and our profit margins. We do engage in currency hedging strategies to offset the effect of currency exchange fluctuations, but the protection offered by these hedges depends upon the timing of transactions, forecast volatility, effectiveness of such hedges and the extent of currency fluctuation.

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

For a discussion of financial information about geographic areas, see Note 14, Segment Information of the Notes to the Consolidated Financial Statements.

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Discontinued Operations

In September 2008, we approved a plan to sell Research Instruments, which developed, manufactured and serviced highly customized scientific instrument components and systems for fundamental and applied physics research primarily for national research laboratories worldwide. The sale of Research Instruments was completed in the second quarter of fiscal year 2009. In fiscal year 2010, we recognized an additional loss of $7.1 million for additional cost to settle one customer contract and estimated costs to complete and settle the other customer contract, both of which were related to the sale of Research Instruments. We have classified Research Instruments as a discontinued operation in our Consolidated Statements of Earnings and Consolidated Balance Sheets for all periods presented. See Note 15, Discontinued Operations of the Notes to the Consolidated Financial Statements for detailed discussion. The operations of Research Instruments were conducted from Bergisch Gladbach, Germany. Research Instruments was previously included with the Varian Particle Therapy business, which is reported under the Other category in Note 14, Segment Information of the Notes to the Consolidated Financial Statements. We decided to sell Research Instruments in order to focus exclusively on the development of our Varian Particle Therapy business.

Employees

We had approximately 5,300 full-time and part-time employees worldwide, 3,100 in the United States and 2,200 elsewhere at October 1, 2010. None of our employees based in the United States are unionized or subject to collective bargaining agreements. Employees based in some foreign countries may, from time to time, be subject to collective bargaining agreements. We currently 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; and current reports on Form 8-K (including any amendments to those reports); and our proxy statements. Our Code of Business Ethics, Corporate Governance Guidelines and the charters of the Audit Committee, Compensation and Management Development Committee and Nominating and Corporate Governance Committee are also available on the Investors page of our website. 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 October 1, 2010, as of are as follows:

Name	Age	Position
Timothy E. Guertin	61	President and Chief Executive Officer
Dow R. Wilson	51	Corporate Executive Vice President and President, Oncology Systems
Elisha W. Finney	49	Corporate Senior Vice President, Finance and Chief Financial Officer
Robert H. Kluge	64	Corporate Senior Vice President and President, X-ray Products
Tai-yun Chen	58	Corporate Vice President, Finance and Corporate Controller
John W. Kuo	47	Corporate Vice President, General Counsel and Corporate Secretary

Timothy E. Guertin has been Chief Executive Officer since February 2006 and President since August 2005. Previously, Mr. Guertin served as Chief Operating Officer from October 2004 to February 2006, and Corporate Executive Vice President from October 2002 to August 2005. Mr. Guertin also served as President of our Oncology Systems business unit from 1992 to January 2005. Mr. Guertin was Corporate

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Vice President from 1992 to 2002. Mr. Guertin has held various other positions in the medical systems business during his 34 years with the Company. Mr. Guertin holds a B.S. degree in electrical engineering and computer science from the University of California at Berkeley.

Dow R. Wilson was appointed Corporate Executive Vice President and President, Oncology Systems in August 2005. 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. Previously, Mr. Wilson served as General Manager, Surgical, x-ray and Interventional Businesses and General Manager, Functional Imaging of the Healthcare-Information Technologies business from 2002 to 2003, and was General Manager, Computed Tomography of the Healthcare-Information Technologies business from 2000 to 2002. During the previous 15 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 has served on the board of directors of Saba Software, Inc. (an e-learning software provider) since August 2006.

Elisha W. Finney was appointed Corporate Senior Vice President, Finance, in addition to being Chief Financial Officer, in January 2005. Ms. Finney was Corporate Vice President and Chief Financial Officer from April 1999 to January 2005. Ms. Finney has held various other positions during her 22 years with the Company including Treasurer. 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 was appointed a director of Thoratec Corporation (a medical device manufacturer) in June 2007.

Robert H. Kluge was appointed Corporate Senior Vice President and President, X-ray Products of the Company in February 2008. Prior to that, Mr. Kluge served as Corporate Vice President and President, X-ray Products from December 1999 to February 2008 and as Vice President and General Manager of our X-ray Products business from 1993 to December 1999. Before joining the Company in 1993, Mr. Kluge held various positions with Picker International (an x-ray systems manufacturer). Mr. Kluge holds a B.A. degree in economics and an M.B.A. degree in finance from the University of Wisconsin.

Tai-yun Chen was appointed Corporate Vice President, Finance and Corporate Controller in August 2006. From February 2006 to August 2006, Ms. Chen served as the Company s Operations Controller. Prior to that, from January 2002 to February 2006, Ms. Chen was the Company s Assistant Corporate Controller, and from 2000 to January 2002 Ms. Chen was the Company s Director of Corporate Accounting. Ms. Chen has served in various accounting management positions throughout the Company during her 27 years with the Company. Ms. Chen holds a bachelor s degree in economics from the National Chung Chi University in Taiwan and a master s degree in managerial economics from the University of California at Santa Barbara.

John W. Kuo was appointed Corporate Vice President, General Counsel in July 2005 and Corporate Secretary in 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) in 2002 and held senior legal positions at 3Com Corporation (a networking equipment provider) from 1997 to 2002. 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.

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

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significant may also impair our business operations. If any of the following risks actually occur, our business, operating results, and financial condition could be adversely affected.

IF OUR PRODUCTS AND PRODUCT LINES FAIL TO CONTINUE TO MEET CUSTOMER DEMANDS, OUR PRODUCTS MAY BECOME LESS USEFUL OR OBSOLETE AND OUR OPERATING RESULTS WILL SUFFER

We believe that IMRT, including VMAT, and IGRT have become accepted standards for treatment in the radiation oncology market. Demand for our IMRT and IGRT products have been historical drivers for our net orders and revenues in Oncology Systems and, because of the significance of Oncology Systems, on our business in general. We recently introduced UNIQUE, a low-energy linear accelerator for more price sensitive markets in international regions, and TrueBeam, a new line of linear accelerators for radiotherapy and radiosurgery, to meet the evolving needs of our IMRT and IGRT customers. We also believe that our RapidArc products for VMAT, are a significant advance in IMRT treatments and can help drive longer term demand for our linear accelerators and IMRT-related products. Orders for these new products and products lines have contributed greatly to our recent orders growth and are keys to our future success. If our customers do not purchase these products or if future studies call into question the effectiveness of these or our other IMRT or IGRT products (including other VMAT products) or show negative side effects, or if other more effective technologies are introduced, our net orders, revenues and financial results could suffer. In addition, if third party information systems do not support our VMAT technology, customers that have third party information systems may not purchase our RapidArc products, which could negatively impact our net orders and revenues. As more institutions buy or upgrade to achieve these capabilities, the market for IMRT and IGRT products (including VMAT products) may become saturated. Alternatively, the marketplace may conclude that functions and features of our products should no longer be an element of a generally accepted diagnostic or treatment regimen. If this occurs, the market for our products may be adversely affected and they may become less useful or obsolete.

Our X-ray Products business sells products primarily to a small number of imaging system OEM customers who use our products in their medical diagnostic and industrial imaging systems. To succeed, we must provide x-ray tube and flat panel detector products that meet customer demands for lower cost, better product quality and superior technology and performance. Flat panel detectors for filmless x-ray imaging have been driving net orders and revenues in the X-ray Products segment, with our newly introduced radiographic panels accountable for a significant part of that expansion. If we are unable to continue to innovate our X-ray Products technology and anticipate our customers demands in the areas of cost, quality, technology and performance, then our customers may purchase from other tube or panel manufacturers (including the in-house operations of some of these customers), which would negatively impact this business.

In both the Oncology Systems and X-ray Products businesses, and in our other product lines, we may be unable to accurately anticipate changes in our markets and the direction of technological innovation and demands of our customers. Our competitors may develop products or processes that are superior to what we can then offer. If this occurs, the market for our products may be adversely affected and they may become less useful or obsolete. Any development adversely affecting the markets for our products would force us to reduce production volumes or to discontinue manufacturing one or more of our products or product lines and would reduce our revenues and earnings.

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

Rapid change and technological innovation characterize the Oncology Systems market. Our products often have long development and government approval cycles, so we must anticipate changes in the

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marketplace, in technology and in customer demands. Our success depends on the successful development, introduction and commercialization of new generations of products, treatment systems and enhancements to and/or simplification of existing product lines. Our Oncology Systems products, including new products such as TrueBeam and RapidArc, are technologically complex and must keep pace with, if not be superior to, the products of our competitors. Our X-ray Products business must also continually develop improved and lower cost products. We are making significant investments in long-term growth initiatives, such as development of our SIP and Particle Therapy businesses, and expect that we will need more investment to develop and commercialize the products and technology for these businesses. Accordingly, many of 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. We may need to spend more time and money than we expect to develop and introduce new products or enhancements and, even if we succeed, they may not be sufficiently profitable 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, and could adversely impact our revenues and operating results. 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, are affected by our ability to:

- properly identify customer needs;
- prove the feasibility of new products;
- limit the time required from proof of feasibility to routine production;
- comply with internal quality assurance systems and processes timely and efficiently;
- limit the timing and cost of regulatory approvals;
- accurately predict and control costs associated with inventory overruns 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 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 Food and Drug Administration (FDA). Failure to complete these processes timely and efficiently could result in delays that could affect our ability to attract and 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 not decide to upgrade their equipment, or

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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.

ROUGHLY 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%, 50% and 52% of revenues from continuing operations during fiscal years 2010, 2009 and 2008, respectively. As a result, 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, although we cannot be sure we will be able to meet our sales, service and support objectives or obligations, or recover our investments. Accordingly, our future results could be harmed by a variety of factors, including:

- the difficulties in enforcing agreements and collecting receivables through many foreign country s legal systems;
- the longer payment cycles associated with many foreign customers;
- the imposition by foreign countries of additional taxes, tariffs or other restrictions on foreign trade;
- the lower sales prices and gross margins usually associated with sales of our products in international regions;
- the longer period from shipment to revenue recognition that generally results in greater revenue recognition deferrals and higher backlog;
- any inability to obtain export licenses and other 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 a foreign jurisdiction;
- changes in the political, regulatory, safety or economic conditions in a country or region; 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 regions have represented a larger share of our business. The more we depend on sales in international regions, the more vulnerable we become to these factors.

As of October 1, 2010, 92% of our cash and cash equivalents were held abroad. If these funds were repatriated to the United States, they 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 respective countries in which our international subsidiaries do business. Earnings from our international regions are generally taxed at rates lower than U.S. rates. A decrease in the percentage of our total earnings from international regions, or a change in the mix of international regions among particular tax jurisdictions,

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could increase our effective tax rate. 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 or actually remitted to the United States, or if tax laws change, in which case our financial results could be adversely affected. In addition, Congress has recently considered proposals that would significantly change U.S. taxation of U.S.-based multinational corporations. Although we cannot predict whether or in what form Congress would enact any such proposals, legislation of this type could negatively impact our effective tax rate and adversely affect our financial results.

OUR RESULTS HAVE BEEN AND MAY CONTINUE TO BE HARMED BY THE WORLDWIDE ECONOMIC DOWNTURN

Since fiscal year 2008, the global economy has been impacted by the sequential effects of the subprime lending crisis; the credit market crisis; collateral effects on the finance and banking industries; volatile currency exchange rates and energy costs; concerns about inflation (deflation), slower economic activity, consumer confidence, corporate profits and capital spending, adverse business conditions, liquidity and unemployment. These conditions have shrunk 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 and may continue to cause our customers to freeze or dramatically reduce purchases and capital project expenditures, and may result in consolidation of our customers. Even with economic recovery, it may take time for our customers to establish new budgets and return to normal purchasing patterns. These conditions may also disrupt supply if vendors consolidate or go out of business. As with our customers and vendors, such conditions make it more difficult for us to accurately forecast and plan our future business activities. We cannot predict the strength or sustainability of an economic recovery, in general or specifically in the healthcare industry. 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 continued weak or deteriorating healthcare market would inevitably adversely affect our business, financial conditions and results of operations. Also, while the economic downturn has primarily affected our business in North America, other economic turmoil, such as the banking and currency instability in Greece and other European countries, may negatively affect our international business.

THE RECENTLY ENACTED AFFORDABLE HEALTHCARE FOR AMERICA 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 Health Care for America Act. While we are continuing to evaluate this legislation and its potential impact on our business, it may adversely affect 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 new law is a 2.3% excise tax on sales of most medical devices, which include our Oncology Systems products, starting in 2013. The Congressional Budget Office estimates that the total cost to the medical device industry could exceed $20 billion over ten years. This tax may put increased pressure on medical device manufacturers and purchasers, and may lead our customers to reduce their orders for products we produce or to request that we reduce the prices we charge for our products in order to off-set the tax. Other elements of this new 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

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demand and availability of our products, the reimbursement available for our products from governmental and third-party payors, and reduced medical procedure volumes.

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 business, and we expect that this uncertainty will persist until there is greater clarity on how the Affordable Health Care for America Act and state proposals will affect healthcare providers. We are unable to predict what effect ongoing uncertainty surrounding these matters 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.

CHANGES TO RADIATION ONCOLOGY REIMBURSEMENTS 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, third-party payors in the United States are increasingly cost-conscious, and we cannot be sure that they will reimburse our customers at levels sufficient to enable us to achieve or maintain sales and price levels for our products in this market. Without adequate support from third-party payors, the market for our products may be limited. There is no uniform policy on reimbursement among third-party payors, nor can we be sure that procedures using our products will qualify for reimbursement from third-party payors. 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 U.S. 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, and could modify reimbursement rates based on the results of comparative effectiveness studies. If comparative effectiveness studies are not available, or if available studies show that other cancer treatments are more effective than radiotherapy or radiosurgery, reimbursement rates for radiotherapy or radiosurgery could be reduced. Any significant cuts in reimbursement rates for radiotherapy, radiosurgery, proton therapy or brachytherapy, or concerns or proposals regarding further cuts, 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 our revenues and stock price.

Foreign governments also have their own healthcare reimbursement systems and we cannot be sure that adequate reimbursement will be made available with respect to our products under any foreign reimbursement system.

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 expenses and/or the profitability in U.S. dollars of products and services that we provide in foreign markets.

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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, and the effectiveness of those strategies, the number of transactions that are hedged, forecast volatility and the extent to which exchange rates have changed. If our hedging strategies do not offset these fluctuations, our revenues and other operating results may be harmed. In addition, movement in foreign currency exchange rates could impact our financial results positively or negatively in one period and not another, making it more difficult to compare our financial results from period to period. Furthermore, on July 21, 2010, President Obama signed into law the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act). The Dodd-Frank Act contains provisions which may impact our existing hedging strategies, but we cannot predict those effects at this time.

In addition, long-term movements in foreign currency exchange rates can also affect the competitiveness of our products in the local currencies of our international customers. Even though our international sales are mostly in local currencies, 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 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. Changes in monetary or other policies here and abroad, including as a result of the economic downturn or in reaction thereto, or in the United States as a result of a change in the U.S. laws or regulations, would also likely affect foreign currency exchange rates.

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 OR RESULT IN SIGNIFICANT PENALTIES

Our products and those of OEMs that incorporate our products are subject to extensive and rigorous government regulation, both in the United States and in foreign countries. 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.

Marketing a medical device in the United States. 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 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 medical device obtain either 510(k) pre-market notification clearance or pre-market approval (PMA) before we 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 may also require a new 510(k) clearance. Obtaining clearances or approvals is time-consuming, expensive and uncertain. 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 those products. If we were unable to obtain required FDA clearance or approval for a product or unduly

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delayed in doing so, or the uses of that product were limited, our business would suffer. In the past, in the United States, our devices have generally been subject to 510(k) clearance or exempt from 510(k) clearance. The 510(k) clearance process is generally less time-consuming, expensive and uncertain than the PMA process. However, there are some in the regulatory field who believe that certain medical devices should be required to use the PMA approval process, or a special more time-consuming 510(k) clearance process, rather than the current 510(k) clearance process. If we were required to use either of these lengthy processes for future products or product modifications, it could delay or prevent release of the proposed products or modifications, which could harm our business.

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 EEA, China, Japan and Canada) can be time consuming, expensive, and uncertain, which can delay our ability to market products in those countries. If we do not obtain the clearance or approvals on one or more of our products, or are unduly delayed in doing so, or if a clearance or approval includes significant limitations on the indicated uses of the product, the market for the affected products would be negatively impacted.

Within the EEA, we must affix a CE mark, a European marking of conformity that indicates that a product meets the relevant regulatory requirements and, when used as intended, works properly and is acceptably safe. This conformity to the applicable directives is done through self-declaration and may be verified by an independent certification body, called a Notified Body. Once clearance is obtained and the CE mark is affixed to the device, the Notified Body will regularly audit us to ensure that we remain in compliance with the applicable European laws or directives. CE marking demonstrates that our products comply with the laws and regulations required by the EEA countries to allow free movement of trade within the EEA countries. If we cannot support our performance claims and demonstrate compliance with the applicable European laws and directives, we lose our CE mark, which would prevent us from selling our products within the EEA. Significant revisions to some of the applicable regulations governing requirements for medical devices in the EEA went into effect in March 2010. These revisions have introduced additional uncertainty into the marketing authorization process for medical devices in Europe. Until medical device manufacturers and European regulatory agencies, including Notified Bodies and competent authorities, have greater experience with interpreting and applying the revised regulations, 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 installed products in order to comply with the official interpretations of these revised regulations.

Quality systems, audits and failure to comply. Our manufacturing operations are required to comply with the FDA s QSR, and other federal and state regulations for medical devices and radiation emitting products that address a company s responsibility for complying with the quality systems regulations, which include the requirements for current good manufacturing practices. The FDA makes announced and unannounced inspections of medical device manufacturers to determine compliance with QSR and in connection with these inspections has issued, and in the future may issue, reports, known as Form FDA 483 reports (listing instances where the manufacturer has failed to comply with applicable regulations and/or procedures), or Warning Letters citing failure to comply with applicable regulations or procedures. If a Warning Letter were issued, we would be required to take prompt corrective action to come into compliance. Failure to respond timely to a Warning Letter or other notice of noncompliance and to come into compliance could result in the FDA bringing enforcement action against us, which could include the total shutdown of our production facilities and criminal and civil fines. 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 and other international regulatory authorities, including reports required by the medical device reporting regulations, and

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similar 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 filed timely, 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 Corrections and Removals 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 and other international regulatory agencies regarding the quality and safety of our devices.

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 international, federal and state regulation that varies from state to state and among countries or regions. Our manufacture, distribution, installation and service 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 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 scientific data to substantiate the claims and that our advertising is neither false nor misleading. If the FDA or FTC determines that any of our advertising or promotional claims are not permissible, we may be subject to enforcement actions and may be required to revise our promotional claims or make other corrections or restitutions.

If we or any of our suppliers, distributors or customers fail to comply with FDA, FTC and other applicable U.S. and foreign country 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, or the equivalent 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;

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- the inability to sell our products, or, where we have failed to comply with foreign regulations, to import our products to such countries;

- difficulty in obtaining product liability or operating insurance at a reasonable cost, or at all; and

- criminal prosecutions.

Other applicable 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, including the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and similar laws and regulations in foreign countries covering data privacy and other protection of health and employee information, fraud and abuse laws and regulations, including, physician self-referral prohibitions, anti-kickback laws 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, HIPAA was recently amended by the Health Information Technology for Economic and Clinical Health Act (the HITECH Act), enacted as part of the American Recovery and Reinvestment Act of 2009. The HITECH Act significantly increases the civil money penalties for violations of patient privacy rights protected under HIPAA. Furthermore, 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, both in the United States and internationally, toward more stringent regulation and enforcement of requirements applicable to medical device manufacturers and requirements regarding protection and confidentiality of personal data.

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 may flow to us as the consequence of regulatory violations; consequently, we do not have insurance that would cover this type of liability.

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 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. 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 to assist us in complying with foreign regulatory requirements, and we cannot be sure that they will always do so. We may be required to incur significant time and expense in obtaining and

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maintaining regulatory approvals. Delays in receipt of or failure to receive regulatory approvals, 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.

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

The Medicare and Medicaid anti-kickback laws, and several 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 third-party 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 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 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 the laws in Massachusetts and Vermont, and the federal Physician Payment Sunshine Act, now require, among other things, extensive tracking, maintenance of data bases regarding and disclosures of relationships and payments to physicians and healthcare providers. 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 European Union (EU), the control of unlawful marketing activities is a matter of national law in each of the member states of the EU. 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.

We are also subject to the U.S. Foreign Corrupt Practices Act, antitrust and anti-competition laws, and similar laws in foreign countries, any violation of which could create a substantial liability for us and also cause a loss of reputation in the market. From time to time, we may face audits or investigations by one or more domestic or foreign government agencies, compliance with which could be costly and time-consuming, and could divert our management and key personnel from our business operations. An

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adverse outcome under any such investigation or audit could subject us to fines or other penalties, which could adversely affect our business and financial results.

As we enter new businesses or pursue new business opportunities, we may become subject to laws, rules and regulations, such as FDA regulations applicable to clinical trials. Becoming familiar with and implementing the infrastructure necessary to comply with these laws, rules and regulations could be quite 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.

PRODUCT DEFECTS OR MISUSE MAY RESULT IN MATERIAL PRODUCT LIABILITY OR PROFESSIONAL ERRORS AND OMISSIONS CLAIMS, INVESTIGATION BY REGULATORY AUTHORITIES OR PRODUCT RECALLS THAT COULD HARM 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; other situations where people may come in contact with radiation (for example, when our SIP 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 diagnosing 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 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 with products from other vendors, where interoperability or data sharing protocol may not be optimized even though the equipment or system operate 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, or their misuse or failure, as well as liability related to the loss or misuse of private patient data. 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, adverse publicity and damage to our reputation, whether or not our products or services were a factor. Adverse publicity regarding any accidents or mistreatments, even ones that do not involve our products, could cause patients to be less receptive to radiotherapy treatments, causing them to question the efficacy of radiation therapy and seek other methods of treatment and adversely impacting our business. Adverse publicity could also result in additional regulation of radiation therapy, medical devices or the healthcare industry in general. Increased regulatory activities could adversely affect our ability to promote, manufacture and sell our products, and therefore 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), we may be required to recall the product and notify regulatory authorities. The adverse publicity resulting from a recall could damage our reputation and cause customers to review and potentially terminate their relationships with us. A product recall could consume management time and have an adverse financial impact on our business, including incurring substantial costs, lost revenues and loss accruals under GAAP that may cause our quarterly results to fluctuate.

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

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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 operation.

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

Rapidly evolving technology, intense competition and pricing pressure characterize the markets for radiation therapy equipment and software. Some of our competitors have greater financial, marketing and other resources than we have. Also, we believe that new competitors will enter our markets, as we have encountered new competitors as we enter new markets such as stereotactic radiosurgery, VMAT and proton therapy. 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 to 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. In addition, additional competitors may delay customer purchasing decisions as customers evaluate the products of these competitors along with ours, potentially extending our sales cycle and adversely affect our net orders.

In x-ray imaging components and subsystems, 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 a competitive advantage in one or more significant areas, which may include lower product cost, better product quality and/or superior technology and/or performance.

In our SIP business, we compete with other OEM suppliers, primarily outside of the United States. The market for our SIP products used for nondestructive testing in industrial applications is small and highly fractured.

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 complete the development of our commercial proton therapy system, lower our product costs, 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 OBI.

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, 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

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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 is highly sophisticated and requires a high level of training and education to use them competently and safely, a requirement made even more important because they work together within integrated environments. We have directed substantial product development efforts into (i) greater 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 emphasized maintaining 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. We face competition though from closed-ended dedicated-use systems 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 enable greater interconnectivity, enhance ease-of-use and reduce setup and treatment times, our revenues could suffer.

Obtaining and maintaining this interoperability and compatibility can be costly and time-consuming. While we try to use standard published protocols for communication with other widely used radiation oncology products manufactured by other companies, if this cannot be done, we may need to develop individual interfaces so that our products communicate correctly. When other companies modify the design or functionality of their products, this may affect their compatibility with our products. When we implement design improvements to our products, customers may be reluctant to adopt our new technology due to 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 us 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.

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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. An unfavorable outcome in any such litigation or proceeding 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 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. 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

The industries in which we compete are characterized by a substantial amount of litigation over patent and other intellectual property rights. Our competitors, like companies in many high technology businesses, continually review other companies products for possible conflicts with their own intellectual property 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, and we may be found to infringe those 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. 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, and we may not prevail in a dispute. We do not maintain insurance for intellectual property infringement, so if we are unsuccessful in defending an infringement claim, we may be subject to significant damages or injunctions against development and sale of our products, or may be required to enter into costly royalty or license agreements. Required licenses may not be made available to us on acceptable terms or at all.

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, glassframes and various other x-ray tube components. If we lose any of these suppliers or if their operations were substantially interrupted, we would be required to obtain and qualify one or more replacement suppliers, which 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 such product by the FDA or other applicable regulatory approvals in other countries. Events like these could significantly increase costs for the affected product and likely cause material

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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. Additionally, some of our suppliers, including some of our single-source suppliers, supply components for certain of our rapidly growing product lines. Manufacturing capacity limitations of any of these suppliers or other inability of these suppliers to meet increasing demand could adversely affect us, resulting in curtailed growth opportunities for any of our product lines. Shortage of, and greater demand for, components and subassemblies could also increase manufacturing costs by increasing prices. Disruptions or loss of any of our limited- or sole-source 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 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 and copper for Oncology Systems and SIP; copper, lead, tungsten, rhenium, molybdenum zirconium, and various high grades of steel alloy for X-ray Products, and high-grade steel, high-grade copper and iron for the Varian Particle Therapy business. Demand for these raw materials both within the United States and from foreign countries, such as China, has increased over the last few years, resulting in limited supplies and higher prices. 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 and prices increase, this could constrain our manufacturing of affected products, reduce our profit margins or otherwise adversely affect our business.

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. As customers consolidate, 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. As a result, the purchasing cycle for our Oncology Systems products could lengthen, as orders increase in size and require more customer approvals. Both increased order size and extended purchasing cycles could cause our net orders to be more volatile and less predictable. In addition, group purchasing organizations often focus on pricing as the determinant in making purchase decisions. A reduction in net 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 X-RAY TUBES TO A LIMITED NUMBER OF OEM CUSTOMERS, MANY OF WHICH ARE ALSO OUR COMPETITORS, AND A REDUCTION IN BUSINESS BY ONE OR MORE OF THESE CUSTOMERS OR CONSOLIDATION OF CUSTOMERS COULD REDUCE OUR SALES

There has been a consolidation of diagnostic imaging systems manufacturers over the past few years, including the consolidation of these customers into companies that already manufacture x-ray tubes. If this continues, we could experience less predictable and reduced sales of our x-ray tube products. In addition, the economic downturn has made it difficult for our OEM customers to accurately forecast and plan future business activities, and we saw our x-ray business impacted in fiscal year 2009 by inventory reduction efforts at some of these customers. In recent years, we have also seen dramatic reductions in Medicare reimbursements for diagnostic radiology. We believe reductions in these Medicare

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reimbursement rates have reduced demand for medical x-ray imaging equipment, such as CT scanners, which have negatively impacted demand for our x-ray tube products. Also, because we sell our x-ray products to a limited number of OEM customers and many of them are also our competitors with in-house x-ray tube manufacturing operations, we could experience the loss of, or reduction in purchasing volume by, one or more of these customers if they lower external sourcing costs. Such a loss or reduction could have a material adverse effect on our X-ray Products business.

ORDERS FOR OUR SECURITY AND INSPECTION PRODUCTS COULD BE UNPREDICTABLE

Our SIP 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. We generally sell SIP 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 the SIP business 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. However, use of linear accelerator and imaging technology in security cargo screening and border protection is in its early stages. Orders for our SIP 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 and acceptance schedules, the actual timing of sales and revenue recognition will vary significantly.

In addition, our SIP business 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 political changes. We have seen customers freeze or dramatically reduce purchases and capital project expenditures, or act cautiously as governments around the world wrestle with spending priorities. Furthermore, bid awards in this business may be subject to challenge by third parties, as we have recently encountered with a large government project, which can make the certainty of some SIP orders unpredictable. As a result, this business is subject to unpredictability in the timing of orders, sales and revenue that 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 a new treatment procedure such as IMRT, IGRT, VMAT, stereotactic radiosurgery 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 our products. For example, the complexity and dynamic nature of IMRT and IGRT requires significant education of hospital personnel and physicians regarding the benefits of IMRT and IGRT and the required departures from their customary practices. Further, the complexity and high cost of proton therapy requires similar significant education, as well as education regarding construction and facility requirements. We have expended and will continue to expend significant resources on marketing and educational efforts to create awareness of IMRT, IGRT, VMAT, stereotactic radiosurgery and proton therapy generally and to encourage the acceptance and adoption of our products for these technologies. Future products may not gain significant market acceptance among physicians, patients and healthcare payors, even if we spend significant time and expense on their education.

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

Our future success depends, to a significant extent, on our ability to attract, expand, integrate, train and retain our management team, qualified engineering personnel, technical personnel and sales and marketing 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, costs related to compensation could increase significantly if supply decreases or demand increases. If we are unable to hire, train or retain qualified personnel, we will not be able to maintain and expand our business, and our business would suffer.

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

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 timely, 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.

IF WE FAIL TO SUCCESSFULLY ACQUIRE OR INTEGRATE NEW BUSINESSES, PRODUCTS AND TECHNOLOGY, WE MAY NOT REALIZE EXPECTED BENEFITS OR MAY 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, in fiscal year 2009 we acquired certain assets of IKOE, a supplier of software used in the planning of radiotherapy and radiosurgery treatments. 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 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 are experiencing with our proton therapy systems, which could 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 at a business that lacks them. 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.

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 Research Instruments, 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, or we may dispose of a business at a lower price or on less advantageous terms than we had anticipated.

We account for our acquisitions under the purchase method of accounting. Under this method, we allocate the total purchase price to the acquired businesses tangible assets and liabilities, identifiable

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intangible assets and in-process research and development costs 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.

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, such as proton therapy. There are substantial risks and uncertainties associated with this, 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. 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 in the development and implementation of new businesses successfully could materially and adversely affect our business, results of operations and financial condition.

WE MAY NOT BE ABLE TO SUCCESSFULLY RESOLVE RESIDUAL ISSUES RELATED TO THE SALE OF OUR RESEARCH INSTRUMENTS BUSINESS

In the second quarter of fiscal year 2009, we completed the sale of Research Instruments. We retained the responsibility for one contract as of the end of fiscal year 2010. We have incurred, and may continue to incur, additional costs beyond those expected with the remaining contract which could adversely affect our financial condition. Continued efforts related to managing the remaining contract have required, and may likely continue to require, a substantial amount of management, administrative, financial and operational resources, particularly as unanticipated difficulties with the fulfillment of these contracts are encountered. These demands may distract our employees and management from the day-to-day operation of our other businesses. If we are not able to successfully resolve these residual retained responsibilities in a timely manner, we may be subject of lawsuits, financial penalties and costs and further management, administrative and operational distraction, all of which may adversely affect 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 for sales and service of our products, principally in Europe and Asia. 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 NET 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 net orders, revenues and margins. Drivers of orders include timing of announcement of and

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introduction 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. 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 expect this to be even greater with our proton therapy products because of the high cost of the 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. As a result of the recent worldwide economic downturn and contraction in credit markets, as well as the uncertainty surrounding the impact of healthcare reform and changes to reimbursement rates, the purchasing cycle has extended and may extend even further 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 even further. The timing of when individual orders are placed, installation is accomplished and the revenues recognized affect our quarterly results.

Once orders are received, factors that may affect whether these orders become revenues and the timing include:

- delay in shipment due, for example, to unanticipated construction delays at customer locations where our products are to be installed, cancellations or rescheduling by customers, extreme weather conditions, natural disasters or port strikes;
- delay in the installation and/or acceptance of a product;
- for proton therapy systems, failure to satisfy contingencies associated with an order;
- the method of accounting used to recognize revenue;
- timing of revenue recognition;
- a change in a customer s financial condition or ability to obtain financing; or
- timing of appropriate 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 the international regions;

fluctuation in our effective tax rate, which may or may not be known to us in advance;

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;

changes in the general economic conditions or tightening of credit available to our customers;

the impact of changing levels of sales on sole purchasers of certain of our x-ray products;

the unfavorable outcome of any litigation or administrative proceeding or inquiry; and

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- accounting changes, such as those relating to accounting reserves for product recalls, reserves for excess and obsolete inventories, share-based compensation expense, accounting for income taxes, 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 are presently below the gross margins for 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 almost certainly decline.

We report on a quarterly and annual basis our net orders and backlog. It is important to understand that, unlike revenues, net orders and backlog are not governed by GAAP, and are not within the scope of the audit or reviews conducted by our independent registered public accounting firm; therefore, investors should not interpret our net orders or backlog in such a manner. Also, for the reasons set forth above, our net orders and backlog cannot necessarily be relied upon as accurate predictors of future revenues. High levels of order cancellation or delays in customer purchase decisions or delivery dates will reduce the quarterly net orders and backlog and also affect the level of future revenues. Accordingly, we cannot be sure if or when orders will mature into revenues. Our net 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.

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

The acquisition of the business we now call Varian Particle Therapy should enable us to develop and offer products for delivering image-guided, intensity-modulated proton therapy for the treatment of cancer. Our success in this area will depend upon the wide-spread awareness, acceptance and adoption by the oncology market of proton therapy systems for the treatment of cancer. However, this technology may not be accepted as quickly as others.

Since proton therapy projects are highly customized and are generally large and more complex, planning for these projects will take more time and use more resources than those in the radiotherapy business conducted in our Oncology Systems segment. Due to its relatively large scale, the construction of a proton therapy facility requires significant capital investment and may involve complex project financing. The worldwide economic downturn resulted in a contraction in credit markets. To the extent this persists, it may 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 our participation in financing arrangements or payment concessions in their agreements with us, which could impact our operating results. In addition, due to their size and complexity, the sales and customer decision cycles for proton therapy projects may take several years. As a result, the timing of these projects, and therefore our operating results for this business, may vary significantly from period to period.

We expect that a limited number of customers will account for a substantial portion of our Varian Particle Therapy business for the foreseeable future. Because an order for a proton therapy system can be relatively large, an order in one fiscal period will cause our financial results to vary significantly, making comparisons between fiscal periods more difficult. Further, the award of a proton therapy system orders may be subject to challenge by third parties, which can make the certainty of these orders unpredictable. If a customer cancels an order for a proton therapy system, such as recently occurred with the order for a proton therapy system for Skandion Kliniken in Sweden, it would negatively impact our orders in the fiscal period in which the order is cancelled and we would lose the opportunity for the product and services revenues that the order represents.

In addition, many of the components used in proton therapy equipment require a long lead time, which may require an increase in our levels of inventory. This may cause fluctuations in the operating results of

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our Varian Particle Therapy business that may make it difficult to predict our results and to compare our results from period to period.

Moreover, entrance into the proton therapy 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 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 are requesting 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. If we must establish special purpose entities to finance and manage a proton therapy project, we may be required to consolidate these special purpose entities in our financial statements. Since the cost of each proton therapy center project will generally exceed $100 million, the amount of potential liability and potential for financial loss may 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. If we cannot reasonably mitigate or eliminate these contingencies or risks, our ability to competitively bid upon proton center projects will be negatively impacted and 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. This and other unanticipated events could adversely affect our business and make our results of operations unpredictable.

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 revolving credit facility 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. 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 FASB, American Institute of Certified Public Accountants, the Public Company Accounting Oversight Board, the Securities and Exchange Commission 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

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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 that regarding revenue recognition, than we have applied in past periods. Additionally, we recognize revenues for some of our proton therapy products and services and for certain highly customized image detection systems in our SIP business under the percentage-of-completion method or the completed-contract method, which affects the timing of revenue recognition. We could be required to apply these methods to other businesses in the future. 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 which must be periodically reviewed and appropriately adjusted. 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 and completed contract 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.

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 reasonably predictable, and others not recurring or easily predicted. 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 a product s useful life, increasing our costs. The EU has also adopted a directive that may lead to restrictions on the use of certain hazardous substances in some of our products sold there. These directives, along with another that requires material disclosure information to be provided upon request, could increase our operating costs. All of these costs, and any future violations or liabilities under environmental laws or regulations, could have a material adverse effect on our business.

AS A STRATEGY TO ASSIST OUR SALES EFFORTS, WE MAY OFFER EXTENDED PAYMENT TERMS, WHICH MAY POTENTIALLY RESULT IN HIGHER DSO AND GREATER PAYMENT DEFAULTS

We offer longer or extended payment terms for qualified customers in some circumstances. 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 October 1, 2010, customer contracts with extended payment terms of more than one year amounted to less than 1% of our accounts receivable balance. While we qualify customers to whom we offer longer or extended payment terms, their financial

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positions may change adversely over the longer time period given for payment. This may result in an increase in payment defaults and uncollectible accounts, which would affect our net earnings. Also, longer or extended payment terms have and may in the future result in an increase in our days sales outstanding.

DISRUPTION OF CRITICAL INFORMATION SYSTEMS COULD HARM OUR BUSINESS AND FINANCIAL CONDITION

Information technology helps us operate efficiently, interface with customers, maintain financial accuracy and efficiency, and accurately produce our financial statements. If we do not allocate and effectively manage the resources necessary to build and sustain the proper technology infrastructure, we could be subject to transaction errors, processing inefficiencies, the loss of customers, business disruptions, or the loss of or damage to intellectual property through security breach. If our data management systems do not effectively collect, 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.

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 in the past. 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, flood, 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. In addition, our facilities, particularly those located in the western states of the United States, 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 or an outbreak of epidemic diseases, such as the swine flu, 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.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of October 1, 2010, we owned and leased a total of approximately two million square feet of floor space for our office, manufacturing, research and development and other services worldwide. Our executive offices and our Oncology Systems management and some of our Oncology Systems manufacturing facilities are located in Palo Alto, California on 30 acres of land under leaseholds which

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expire in calendar year 2056. We own these facilities, which contain 465,279 square feet of aggregate floor space. We also own 47,699 square feet of space and two acres of land in Crawley, England. In Beijing, China we own 138,618 square feet of space located on five acres of land under a leasehold that expires in calendar year 2056. Our X-Ray Products business is located in Salt Lake City, Utah, where we own 38 acres of land and 340,812 square feet of space. In Las Vegas, Nevada, we own 191,422 square feet of floor space and 12 acres of land where our SIP Manufacturing and Oncology Systems Customer Services and Support operations are located. Two Las Vegas buildings and the related land have been pledged as collateral against loans with a balance of $5.6 million. The Ginzton Technology Center is located in Mountain View, California and it is under an operating lease that expires in calendar year 2011. The balance of our facilities are leased.

We are occupying substantially most of our productive space to develop, manufacture, service and market our products. We believe that our facilities and equipment are generally well maintained, in good operating condition and adequate for present operations.

Item 3. Legal Proceedings

The following summarizes the current status of our previously reported legal proceedings.

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 and, from time-to-time, acquired as part of business acquisitions that we make. See MD&A Other Matters. While we cannot assure you as to the ultimate outcome of any legal proceeding or other loss contingency involving us, management does not believe any pending matter will be resolved in a manner that would have a material adverse effect on our business.

Item 4. Reserved

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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 2010 and 2009.

	High	Low
Fiscal Year 2010		
First Quarter	$ 47.78	$ 38.71
Second Quarter	$ 56.38	$ 46.96
Third Quarter	$ 57.70	$ 35.50
Fourth Quarter	$ 61.38	$ 50.83
Fiscal Year 2009		
First Quarter	$ 61.10	$ 33.12
Second Quarter	$ 39.77	$ 27.10
Third Quarter	$ 38.31	$ 29.56
Fourth Quarter	$ 44.53	$ 31.21

Since the Spin-offs and becoming Varian Medical Systems, Inc., 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 unsecured term loan agreement and revolving credit facility agreement contain 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, Credit Facility of the Notes to the Consolidated Financial Statements for more information on our revolving credit facility.

As of November 18, 2010, there were approximately 3,420 holders of record of VMS common stock.

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PERFORMANCE GRAPH

This graph shows the total return on Varian Medical Systems, Inc. common stock and certain indices from September 30, 2005 until the last day of fiscal year 2010.

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 9/30/05 in stock or index, including reinvestment of dividends. Indexes calculated on month-end basis.

	9/30/05	9/29/06	9/28/07	9/26/08	10/2/09	10/1/10
Varian Medical Systems, Inc.	**100.00**	**135.13**	**106.02**	**154.85**	**101.27**	**153.58**
S&P 500	**100.00**	**110.79**	**129.01**	**100.66**	**93.70**	**103.22**
S&P Health Care Equipment	**100.00**	**96.42**	**115.83**	**115.10**	**96.34**	**93.25**

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.

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Stock 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 2010.

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs(1)	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs(1)
July 3, 2010 July 30, 2010	250,000	$ 52.96	250,000	1,050,000
July 31, 2010 August 27, 2010	4,601,159(2)	$ 52.67(2)	4,588,249	4,461,751
August 28, 2010 October 1, 2010		$ 0.00		4,461,751
Total	4,851,159	$ 52.69	4,838,249	

(1) On November 13, 2009, VMS s Board of Directors authorized the repurchase of 5,000,000 shares of VMS common stock from January 1, 2010 through December 31, 2010, which authorization was completed when the accelerated share repurchase agreement was concluded. On August 6, 2010, VMS s Board of Directors authorized the repurchase of an additional 8,000,000 shares of VMS common stock from August 7, 2010 through September 30, 2011, a portion of which was also satisfied in connection with the accelerated share repurchase. We expect remaining repurchases under this authorization, if any, will be made in open market purchases, in privately negotiated transactions or under Rule 10b5-1 share repurchase plans, and may be made from time to time or in one or more large blocks. Shares will be retired upon repurchase.

(2) Includes 12,910 shares of VMS common stock that were tendered to VMS in satisfaction of tax withholding obligations upon the vesting of restricted common stock granted under the Company s employee stock plans. Also includes an aggregate of 3,888,249 shares of VMS common stock repurchased through an accelerated share repurchase agreement entered into with Bank of America, N.A. See Note 11 Stockholders Equity of the Notes to the Consolidated Financial Statements for a detailed discussion of this accelerated share repurchase agreement, which discussion is incorporated herein by reference.

Item 6. Selected Financial Data

We derived the following selected financial data from our audited consolidated financial statements for the five fiscal years ended from September 30, 2005 to October 1, 2010. 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.

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Summary of Operations:

(In millions, except per share amounts)	Fiscal Years 2010	2009	2008	2007	2006
Revenues	$ 2,356.6	$ 2,214.1	$ 2,069.7	$ 1,755.1	$ 1,597.8
Earnings from continuing operations before taxes	532.9	474.6	426.0	346.0	318.7
Taxes on earnings(1)	165.4	143.1	130.7	103.1	75.1
Earnings from continuing operations	367.5	331.5	295.3	242.9	243.6
Earnings (Loss) from discontinued operations, net of taxes(2)	(7.1)	(12.5)	(15.8)	(3.4)	1.5
Net earnings(1)	$ 360.4	$ 319.0	$ 279.5	$ 239.5	$ 245.1
Net earnings (loss) per share Basic(1)					
Continuing operations	$ 3.02	$ 2.67	$ 2.37	$ 1.91	$ 1.86
Discontininued operations(2)	(0.06)	(0.10)	(0.13)	(0.03)	0.01
Net earnings per share	$ 2.96	$ 2.57	$ 2.24	$ 1.88	$ 1.87
Net earnings (loss) per share Diluted(1)					
Continuing operations	$ 2.96	$ 2.65	$ 2.31	$ 1.86	$ 1.80
Discontininued operations(2)	(0.05)	(0.10)	(0.12)	(0.03)	0.01
Net earnings per share	$ 2.91	$ 2.55	$ 2.19	$ 1.83	$ 1.81
Financial Position at Fiscal Year End:					
Working capital	$ 777.8	$ 830.1	$ 612.7	$ 378.5	$ 512.1
Total assets	2,324.0	2,308.2	1,975.5	1,684.4	1,511.8
Long-term debt (including current maturities)	23.4	32.4	40.4	49.4	57.3
Short-term borrowings	20.0	4.4		41.0	
Stockholders equity	1,275.4	1,311.8	1,027.2	821.5	797.3

(1) During fiscal year 2006, we repatriated approximately $128 million in foreign earnings pursuant to the American Jobs Creation Act of 2004 and recorded a $12 million net tax benefit. We also recorded a net tax benefit of $7.2 million in fiscal year 2006 related to adjustments of certain prior years state and federal temporary differences.

(2) In September 2008, we approved a plan to sell Research Instruments. The sale of Research Instruments was completed in the second quarter of fiscal year 2009. The Company classified the operating results as a discontinued operation in the Consolidated Statements of Earnings for all periods presented. The net loss of $7.1 million, $12.5 million, $15.8 million and $3.4 million was reported in discontinued operations for fiscal years 2010, 2009, 2008 and 2007, respectively.

In fiscal year 1995, Varian Associates, Inc. completed the sale of its Electron Devices business segment. The transaction was accounted for as discontinued operations. In fiscal year 2006, we recognized a pre-tax gain from discontinued operations of $2.5 million and a related tax expense of $1.0 million. The net gain of $1.5 million resulted from the release of a reserve for certain contingencies associated with the Electron Devices business segment. Following release of that reserve, we no longer had any asset or liability related to this discontinued operation.

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

Overview

In fiscal year 2010, net earnings per diluted share from continuing operations increased 12% from fiscal year 2009. Operating earnings, as a percentage of revenues, increased in fiscal year 2010 from the prior fiscal year. Reflecting weak net orders in fiscal year 2009, total revenues from continuing operations grew 6% in fiscal year 2010 over fiscal year 2009. Demand for new products, particularly our TrueBeam™ systems in Oncology Systems and our radiographic flat panels in X-ray Products, drove net order growth. Net orders increased 5% in fiscal year 2010 over fiscal year 2009, which included a now-cancelled $62 million proton therapy system order from Skandion Kliniken. Excluding the proton system order, net orders in fiscal year 2010 grew 10% over fiscal year 2009. Backlog at the end of fiscal year 2010 was 7% higher than at the end of the prior fiscal year. During fiscal year 2010, we used $498 million to repurchase 9.8 million shares of VMS common stock. In fiscal year 2010, we believe we successfully navigated within a tough environment and, by the end of the fiscal year, there is greater clarity on the uncertainties created by the economic downturn on hospital budgets, the healthcare reform in the United States and, for fiscal year 2011, the reimbursement rates for radiotherapy and radiosurgery at free-standing clinics in the United States.

Effective in the fourth quarter of fiscal year 2008, we classified Research Instruments as a discontinued operation for all periods presented in our Consolidated Statements of Earnings. Including a $0.05 loss from these discontinued operations, net earnings in fiscal year 2010 were $2.91 per diluted share. Research Instruments was previously included in the Other category. Unless otherwise stated, the discussion in this MD&A pertains to our continuing operations.

Oncology Systems. Our largest business segment is Oncology Systems, which designs, manufacturers, sells and services hardware and software products for radiation treatment of cancer with conventional radiotherapy, IMRT, IGRT, VMAT (an advanced form of IMRT), stereotactic radiotherapy, stereotactic radiosurgery and brachytherapy.

In the second quarter of fiscal year 2010, we introduced the TrueBeam system for image-guided radiotherapy and radiosurgery. This product line is a fully-integrated system designed from the ground up to treat a moving target with higher speed and accuracy. Including a small portion of TrueBeam orders representing upgrades from other linear accelerators already in our backlog, through October 1, 2010, we had received orders for more than 125 TrueBeam systems since its introduction, a majority of which came from North America. We believe TrueBeam will be a valuable tool for clinicians in the fight against cancer and we expect it will stimulate stronger demand for our surgical products, as well as faster replacement of older systems in our installed base. Our ability to successfully introduce and commercialize new product lines, such as TrueBeam, without disrupting the ongoing demand for our existing product lines is important and failure to do so may have a negative impact on revenues and net earnings.

Oncology Systems net orders increased 10%, or 8% on a constant currency basis, in fiscal year 2010 over fiscal year 2009 with growth from both the international and North American regions. Increased demand for our linear accelerators (driven by demand for the new TrueBeam system and, to a lesser extent, the UNIQUE low-energy linear accelerator) and our software products contributed to the growth in total Oncology Systems net orders, as did continued growth in demand for our service contracts. As of fiscal year end 2010, Oncology Systems had reported three consecutive quarters of double-digit net order growth worldwide and two consecutive quarters of double-digit net order growth in North America over the year earlier periods. Continuing growth in demand for our Oncology Systems products depend in part on the strength and sustainability of an economic recovery in the United States.

Following weak North American net orders in fiscal year 2009, Oncology Systems recorded an 11% decrease in North American revenues in fiscal year 2010 over fiscal year 2009 but a 21% increase in international revenues. Oncology Systems total revenues rose 4% in the aggregate primarily because of continued growth in service contract revenues. Oncology Systems gross margin in fiscal year 2010

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improved from fiscal year 2009 as an increase in service contract gross margin more than offset a decrease in product gross margin.

X-Ray Products. Our X-ray Products business segment, designs, manufactures and sells: (i) x-ray tubes for use in a range of applications including CT scanning, radiographic or fluoroscopic imaging, mammography, special procedures and industrial applications; and (ii) flat panel detectors for filmless x-ray imaging.

In fiscal year 2010, X-ray Products reported record net orders, revenues and operating earnings. Net orders and revenues increased 24% and 22%, respectively, in fiscal year 2010 over fiscal year 2009, reflecting a recovery in the global imaging equipment industry. Both the flat panel (including the radiographic flat panels) and the x-ray tube product lines contributed to the increase in net orders and revenues. X-ray Products gross margin improved in fiscal year 2010 over fiscal year 2009 primarily due to a product mix shift towards a higher proportion of higher margin products and higher sales volume.

Our success in our X-ray Products business depends upon our ability to anticipate changes in our markets, the direction of technological innovation and the demands of our customers. In addition, changes in access to diagnostic radiology or the reimbursement rates associated with diagnostic radiology as a result of the Affordable Health Care for America Act and similar state proposals will likely affect demand for our products.

Other. The Other category is comprised of: (i) SIP, which designs, manufactures, sells and services Linatron® x-ray accelerators, imaging processing software and image detection products (including IntellX™) for security and inspection, (ii) our Varian Particle Therapy business, which designs, develops, manufactures, sells and services products and systems for delivering proton therapy treatments, and (iii) the operations of the GTC, our scientific research facility.

Net orders in the Other category declined in fiscal year 2010 from fiscal year 2009 primarily because we recorded the now-cancelled $62 million proton therapy system order from Skandion Kliniken in the prior fiscal year, and to a lesser extent, because of a decrease in SIP net orders as this business was negatively impacted by bid award challenges among competitors for a large government project in North America. Total revenues in the Other category increased 8% primarily due to an increase in service revenues from Varian Particle Therapy related to the commissioning of a proton therapy system, partially offset by a decrease in SIP revenues.

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, valuation of inventories, assessment of recoverability of goodwill and intangible assets, valuation of warranty obligations, assessment of environmental remediation liabilities, 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,

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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

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.

At the beginning of the second quarter of fiscal year 2010, we elected to early adopt the amended software revenue guidance and amended multiple deliverable revenue arrangement guidance on a prospective basis as of the beginning of fiscal year 2010 and have applied the amended guidance for revenue arrangements originating or materially modified after October 2, 2009. Under the amended guidance, 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 is 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.

Under the prior authoritative guidance, the allocation of consideration to each deliverable in a multiple deliverable arrangement is affected by our judgment as to whether objective and reliable evidence of fair value existed for hardware deliverables and VSOE of the fair value existed for software deliverables 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 and is subject to customer acceptance and the readiness of customers facilities. If shipments 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.

In addition, revenues related to certain proton therapy commissioning service contracts and highly customized image detection systems are recognized under the percentage-of-completion method. Under the percentage-of-completion method of accounting, sales and gross profit are recognized as work is performed, based on the relationship between actual costs incurred and total estimated costs at the completion of the contract. 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. If a loss is expected on a contract under the percentage-of-completion method or completed contract method, the estimated loss would be charged to cost of sales in the period the loss is identified.

Share-based Compensation Expense

We value our stock options granted and the option component of the shares purchased under the Employee Stock Purchase Plan using the Black-Scholes option-pricing model. The determination of fair value of share-based payment awards on the date of grant using the Black-Scholes option-pricing model is affected by VMS s stock price, as well as the input of other subjective assumptions, including the expected term of stock awards and the expected price volatility of VMS stock over the expected term of the awards.

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The expected term is based on the observed and expected time to post-vesting exercise and post-vesting cancellations of stock options by our employees. We determined the expected term of stock options based on the demographic grouping of employees and retirement eligibility. We used a combination of historical and implied volatility, or blended volatility, in deriving the expected volatility assumption. 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. The risk-free interest rate assumption is based upon observed interest rates appropriate for the term of our stock options. 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 and recognize expense only for those shares expected to vest. If our actual forfeiture rate is materially different from our estimate, the stock-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, SIP and Varian Particle Therapy, and orders in our X-ray Products business, 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.

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 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. The majority of

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businesses that we have acquired have not had significant identified tangible assets and, as a result, we have typically allocated a significant portion of the purchase price to intangible assets and goodwill. 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.

In accordance with Accounting Standard Codification (ASC) 350, we evaluate 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. 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 the present value of estimated future cash flows of the reporting units. 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. Based on the most recent annual goodwill impairment testing that we performed in the fourth quarter of fiscal year 2010 for each of our four reporting units with goodwill (Oncology Systems, X-ray Products, SIP and Varian Particle Therapy), the fair value of each such reporting unit was substantially in excess of its carrying value. We will continue to make assessments of impairment on an annual basis in the fourth quarter of our fiscal years or more frequently if indicators of potential impairment arise.

Warranty Obligations

We warrant most of our products for a specific period of time, usually twelve months, 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.

Environmental Matters

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 and in connection with past operations. In connection with past operations, 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

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these accrued balances quarterly. Were we required to increase or decrease the accrued environmental costs in the future, it would adversely or favorably impact our operating results.

Defined Benefit Pension and Post-Retirement Benefit Plans

We sponsor five defined benefit pension plans in Germany, Japan, Switzerland and the United Kingdom covering employees who meet the applicable eligibility requirements in these countries. In July 2007, we made changes to the defined benefit pension plan in the United Kingdom by terminating the accrual of additional benefits for existing participants and suspending the enrollment of new participants. Although we do not have any defined benefit pension plans in the United States, we sponsor a post-retirement benefit plan that provides healthcare benefits to certain eligible retirees. Several statistical and other factors that attempt to anticipate future events are used in calculating the expenses and liabilities related to those plans for which the benefits are actuarially determined, such as our defined benefit pension and post-retirement benefit plans. These factors include assumptions about the discount rate, expected return on plan assets, rate of future compensation increases and rate of healthcare cost 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 and post-retirement benefit plan expense 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 in all countries are based primarily on the yields of a universe of high quality corporate bonds in each country or the spot rate of high quality AA-rated corporate bonds, with durations corresponding to the expected durations of the benefit obligations. In countries where the corporate bond market is not sufficiently representative of the time period at longer durations, the discount rate also takes into account the yield of long-term government bonds corresponding to the duration of the benefit obligations and the difference between the yield curve on high quality corporate fixed-income investments and government fixed-income investments. A change in the discount rate will cause the present value of benefit obligations to change in the opposite direction.

Valuation of Derivative Instruments

We use foreign currency forward contracts to reduce the effects of currency 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. ASC 820 establishes three levels of inputs that may be used to measure fair value (see Note 3, Fair Value Measurements of the Notes to the Consolidated Financial Statements). Each level of input has different levels of subjectivity and difficulty involved in determining fair value. 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 less than 12 months, 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 (for net asset) or our discount rate (for net liability). 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 to the valuation of our derivative instruments, as well as on our result of operations.

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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.

The provisions in ASC 740 related to accounting for uncertainty in income taxes contain a two-step approach to recognizing, derecognizing 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, derecognition and measurement are based on management s best judgment given the facts, circumstances and information available at the end of the accounting period. A tax benefit should be recognized in the first period in which it meets the more likely than not recognition threshold, and conversely, a tax benefit previously recognized should be derecognized in the first period in which new information results in a change in judgment in which the position fails to meet the recognition threshold. A benefit not previously recognized would be recognized when the tax position is effectively settled through examination, negotiation or litigation with tax authorities, or when the statute of limitations for the relevant taxing authority to examine and challenge the position has expired. Our policy is to include interest and penalties related to unrecognized tax benefits within the provision for taxes on earnings.

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.

Earnings derived from our international regions 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 international subsidiaries do business. In addition, a decrease in the percentage of our total earnings from our international regions, or a change in the mix of international regions among particular tax jurisdictions, could increase our effective tax rate. Also, 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 deemed or actually 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 2010 was the 52-week period ended on October 1, 2010. Fiscal year 2009 was the 53-week period ended on October 2, 2009 and fiscal year 2008 was the 52-week period ended on September 26, 2008. Set forth below is a discussion of our results of operations for fiscal years 2010, 2009 and 2008. As indicated above, the operating results of Research Instruments have been segregated and presented as a discontinued operation in our Consolidated Statements of Earnings for all periods.

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Discussion of Results of Operations for Fiscal Years 2010, 2009 and 2008

Total Revenues

Revenues by sales classification (Dollars in millions)	Fiscal Years 2010	% Change	2009	% Change	2008
Product	$ 1,814	3%	$ 1,767	5%	$ 1,690
Service Contracts and Other	543	21%	447	18%	380
Total Revenues	$ 2,357	6%	$ 2,214	7%	$ 2,070
Product as a percentage of total revenues	*77%*		*80%*		*82%*
Service Contracts and Other as a percentage of total revenues	*23%*		*20%*		*18%*
Revenues by region					
North America	$ 1,012	(9)%	$ 1,111	11%	$ 1,003
Europe	747	21%	620	0%	619
Asia	513	24%	412	18%	349
Rest of world	85	19%	71	(28)%	99
Total International(1)	1,345	22%	1,103	3%	1,067
Total	$ 2,357	6%	$ 2,214	7%	$ 2,070
North America as a percentage of total revenues	*43%*		*50%*		*48%*
International as a percentage of total revenues	*57%*		*50%*		*52%*

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

Total revenues increased in fiscal year 2010 over fiscal year 2009, as increased revenues in Oncology Systems, X-ray Products and Varian Particle Therapy were partially offset by a decrease in SIP revenues. Total revenues also increased in fiscal year 2009 over fiscal year 2008 primarily due to the revenue growth in both our Oncology Systems and X-ray Products business segments, which again was partially offset by a decline in SIP revenues.

In fiscal year 2010, the increase in product revenues over fiscal year 2009 was primarily due to an increase in product revenues from X-ray Products, which was mostly offset by the decreases in product revenues from Oncology Systems and SIP. In fiscal year 2009, growth in Oncology Systems and X-ray Products product revenues over fiscal year 2008 was partially offset by a decline in SIP product revenue. Product revenues grew more slowly from fiscal year 2009 to fiscal year 2010 as compared to fiscal year 2008 to fiscal year 2009, primarily because of the decrease in Oncology Systems product revenues in fiscal year 2010 compared to fiscal year 2009.

Oncology Systems service contracts revenues were the primary contributor to the growth in service contracts and other revenues in fiscal year 2010 over fiscal year 2009 and in fiscal year 2009 over fiscal year 2008, although, to a lesser extent, Varian Particle Therapy and SIP also contributed to the increases in service contracts and other revenues. Service contracts and other revenues grew faster in fiscal year 2010 over 2009 compared to fiscal year 2009 over fiscal year 2008 primarily due to the faster growth in Oncology Systems service contract revenues in fiscal year 2010 over fiscal year 2009.

North American revenues decreased in fiscal year 2010 over fiscal year 2009 as the decline in North American revenues from Oncology Systems and SIP more than offset the increase in X-ray Products North American revenues. Oncology Systems, X-ray Products and SIP contributed to the growth in North American revenues in fiscal year 2009 over fiscal year 2008.

Oncology Systems, X-ray Products, SIP and Varian Particle Therapy all contributed to the growth in international revenues in fiscal year 2010 over fiscal year 2009. Europe, with revenue growth from all businesses, and Asia, with revenue growth primarily from Oncology Systems and

X-ray Products,

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contributed to the bulk of the growth in international revenues in fiscal year 2010 over fiscal year 2009. In the rest of the world region, the increase in Oncology Systems revenues in fiscal year 2010 over fiscal year 2009 was partially offset by a decrease in X-ray Products revenues. Overall, the U.S. dollar was weaker against foreign currencies in fiscal year 2010 compared to fiscal year 2009, which favorably affected our international revenues when measured in U.S. dollars.

In fiscal year 2009, the increase in international revenue over fiscal year 2008 was due to growth in Oncology Systems and X-ray Products international revenues, which was partially offset by a decrease in SIP international revenues. For Asia, Oncology Systems, X-ray Products and SIP all contributed to the fiscal year 2009 revenue growth over fiscal year 2008, while the growth in Oncology Systems and X-ray Products European revenues was offset by a decline in SIP European revenues. Oncology Systems and X-ray Products experienced revenue declines in the rest of the world region. The overall stronger U.S. dollar in fiscal year 2009 against foreign currencies compared to fiscal year 2008 negatively affected our international revenues in fiscal year 2009 when measured in U.S. dollars.

Oncology Systems Revenues

Revenues by sales classification			**Fiscal Years**		
(Dollars in millions)	**2010**	**% Change**	**2009**	**% Change**	**2008**
Product	$ 1,343	(1)%	$ 1,363	5%	$ 1,302
Service Contracts(1)	519	19%	435	17%	370
Total Oncology Systems	$ 1,862	4%	$ 1,798	8%	$ 1,672
Product as a percentage of Oncology Systems revenues	*72%*		*76%*		*78%*
Service Contracts as a percentage of Oncology Systems revenues	*28%*		*24%*		*22%*
Oncology Systems revenues as a percentage of total revenues	*79%*		*81%*		*81%*

(1) Revenues from service contracts represent revenues from fixed-term service contracts and labor cost services. This excludes revenues from spare parts sold by our service department.

Oncology Systems product revenues decreased in fiscal year 2010 over fiscal year 2009 primarily as a result of decreased revenues from sales of our linear accelerators, partially offset by increased revenues from sales of our brachytherapy products. For fiscal year 2009, the increase in Oncology Systems product revenues over fiscal year 2008 was primarily due to the increase in revenues from sales of our software products.

The increases in service contract revenues, in fiscal year 2010 over fiscal year 2009 and in fiscal year 2009 over fiscal year 2008 were primarily driven by increased customer adoption of service contracts as our products become more sophisticated and by increased number of customers as the installed base of our products continues to grow. Since service contract revenues grew faster than product revenues from fiscal year 2008 to fiscal year 2009 and from fiscal year 2009 to fiscal year 2010, service contract revenues also increased as a percentage of total Oncology Systems revenues in each year.

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Overall, the U.S. dollar was weaker against foreign currencies in fiscal year 2010 compared to fiscal year 2009, which favorably affected our international revenues when measured in U.S. dollars. In fiscal year 2009, the stronger U.S. dollar against foreign currencies compared to fiscal year 2008 negatively affected Oncology Systems international revenues when measured in U.S. dollars.

Revenues by region (Dollars in millions)	**Fiscal Years 2010**	**% Change**	**2009**	**% Change**	**2008**
North America	$ 860	(11)%	$ 970	12%	$ 866
Europe	614	17%	524	1%	517
Asia	309	27%	242	21%	200
Rest of world	79	28%	62	(31)%	89
Total International	1,002	21%	828	3%	806
Total Oncology Systems	$ 1,862	4%	$ 1,798	8%	$ 1,672
North America as a percentage of Oncology Systems revenues	*46%*		*54%*		*52%*
International as a percentage of Oncology Systems revenues	*54%*		*46%*		*48%*

In fiscal year 2010, the international region drove the growth in Oncology Systems revenues over fiscal year 2009 and represented more than half of total Oncology Systems revenues. All international regions contributed to the increase in international Oncology Systems revenues in fiscal year 2010 over fiscal year 2009. The increase in international Oncology Systems revenues in fiscal year 2010 over fiscal year 2009 reflected higher product revenue driven by increased sales across most product lines, as well as an increase in service contract revenues. Overall, the U.S. dollar was weaker against foreign currencies in fiscal year 2010 compared to fiscal year 2009, which favorably affected our international revenues when measured in U.S. dollars.

Except for the rest of the world region, all of our international regions contributed to the Oncology Systems revenues growth in fiscal year 2009 over fiscal year 2008. The increase in revenues from sales of our software products and the increase in service contract revenues in Asia and Europe were significantly offset by the decline in sales of our linear accelerators in the rest of the world region and Europe. The overall stronger U.S. dollar against foreign currencies in fiscal year 2009 compared to fiscal year 2008 also negatively affected our international revenues when measured in U.S. dollars.

Due to decreases in sales in most product lines, North American Oncology Systems product revenues decreased in fiscal year 2010 over fiscal year 2009, although the decrease was partially offset by increased service contract revenues. In fiscal year 2009, the increase in North American Oncology Systems revenues over fiscal year 2008 was primarily due to an increase in revenues from sales of our software products and our linear accelerators, as well as an increase in service contract revenues.

Varying cycles of higher and lower revenues between the international and North American regions is a historical pattern reflecting regional influences such as effects of the recession, uncertainty created by healthcare reform and reductions in Medicare reimbursement rates for radiotherapy and radiosurgery in the United States, and different technology adoption cycles that are consistent with the net order patterns discussed more fully under Net Orders.

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X-ray Products Revenues

Revenues by region (Dollars in millions)	Fiscal Years 2010	% Change	2009	% Change	2008
North America	$ 128	16%	$ 110	3%	$ 107
Europe	68	37%	49	9%	45
Asia	201	24%	162	14%	143
Rest of world	6	(36)%	10	(2)%	10
Total International	275	24%	221	12%	198
Total X-ray Products	$ 403	22%	$ 331	9%	$ 305
North America as a percentage of X-ray Products revenues	*32%*		*33%*		*35%*
International as a percentage of X-ray Products revenues	*68%*		*67%*		*65%*
X-ray Products revenues as a percentage of total revenues	*17%*		*15%*		*15%*

X-ray Products revenues grew 22% in fiscal year 2010 over fiscal year 2009, compared to revenue growth of 9% in fiscal year 2009 over fiscal year 2008, as we saw signs in 2010 of recovery in the global imaging equipment industry. This business segment grew faster in both the international region and North America in fiscal year 2010 over fiscal year 2009 than in fiscal year 2009 over fiscal year 2008.

The increase in X-ray Products international revenues in fiscal year 2010 over fiscal year 2009 was primarily due to increased revenues from sales of our flat panel products in Europe and Asia and increased revenues from sales of our x-ray tube products in Asia. The increase in X-ray Products North American revenues in fiscal year 2010 over fiscal year 2009 was due to increased revenues from sales of our flat panel products, partially offset by a decline in revenues from sales of our x-ray tube products.

For fiscal year 2009, the growth in X-ray Products revenues was primarily driven by increased international revenues and, to a lesser extent, increased North American revenues. The increase in international revenues in fiscal year 2009 over fiscal year 2008 was primarily due to increased revenues from sales of our flat panel detectors, including our radiographic flat panels, in Europe and Asia, as well as increased revenues from sales of x-ray tubes in Asia. Revenue growth in North America in fiscal year 2009 over fiscal year 2008 was largely due to the growth in revenues from sales of our x-ray tubes, while revenues from sales of our flat panel products decreased slightly notwithstanding increased revenues from sales of our radiographic flat panels.

Other Revenues

Revenues by sales classification (Dollars in millions)	Fiscal Years 2010	% Change	2009	% Change	2008
Product	$ 68	(7)%	$ 73	(13)%	$ 83
Service Contracts and Other	24	99%	12	24%	10
Total Other	$ 92	8%	$ 85	(9)%	$ 93
Other revenues as a percentage of total revenues	*4%*		*4%*		*4%*

Revenues in our Other category, which is comprised of SIP, Varian Particle Therapy and GTC, increased in fiscal year 2010 over fiscal year 2009 primarily due to an increase in Varian Particle Therapy service revenues related to the commissioning of a proton therapy system, partially offset by a decrease in SIP revenues from decreased sales of our Linatron products. Revenues in our Other category decreased in fiscal year 2009 over fiscal year 2008 primarily due to declines in product revenues in our SIP business as a result of slower deployment of products for security and inspection systems.

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Gross Margin

(Dollars in millions)	Fiscal Years 2010	% Change	2009	% Change	2008
Dollar by segment					
Oncology Systems	$ 837	4%	$ 806	12%	$ 723
X-ray Products	162	25%	130	9%	120
Other	27	8%	25	(30)%	35
Gross margin	$ 1,026	7%	$ 961	9%	$ 878
Percentage by segment					
Oncology Systems	*44.9%*		*44.8%*		*43.2%*
X-ray Products	*40.3%*		*39.3%*		*39.3%*
Total Company	*43.5%*		*43.4%*		*42.4%*

In fiscal year 2010, total company gross margin percentage increased slightly over fiscal year 2009 primarily due to the improvement in X-ray Products and Oncology Systems gross margins, while the gross margin percentage for the Other category remained relatively flat. The increase in total company gross margin percentage for fiscal year 2009 over fiscal year 2008 was primarily due to the improvement in Oncology Systems gross margin, which was partially offset by the decreases in gross margins in the Other category while X-ray Product gross margin remained flat. The decrease in gross margin in the Other category in fiscal year 2009 was primarily due to the decrease in Varian Particle Therapy gross margin resulting from higher estimated costs for completion of contractual commitments associated with the acquisition of ACCEL, which is discussed in more details in Acquisition-Related Commitments/Obligations. Total product gross margin was 41.8% in fiscal year 2010, compared to 42.6% in fiscal year 2009 and 41.7% in fiscal year 2008. Total service contracts and other gross margin was 49.2% in fiscal year 2010, compared to 46.4% in fiscal year 2009 and 45.5% in fiscal year 2008.

In fiscal year 2010, Oncology Systems gross margin increased over fiscal year 2009 due to an increase in Oncology Systems service contract gross margin that was mostly offset by a decline in Oncology Systems product gross margin. Oncology Systems product gross margin was 42.6% in fiscal year 2010, compared to 43.7% in fiscal year 2009, primarily due to the geographic mix shift towards a higher proportion of international revenues, which typically have lower margins than revenues from North America, partially offset by a product mix shift toward a greater proportion of higher margin software products. Oncology Systems service contract gross margin was 51.0% in fiscal year 2010, compared to 48.3% in fiscal year 2009. The increase in Oncology Systems service contract gross margin in fiscal year 2010 over fiscal year 2009 was mainly due to higher service contract volume, cost control initiatives and lower costs associated with quality.

Improvements in both product gross margin and service contract gross margin contributed to the increases in Oncology Systems gross margins in fiscal year 2009 over fiscal year 2008. Oncology Systems product gross margin was 43.7% in fiscal year 2009 compared to 42.4% in fiscal year 2008 primarily due to product mix shift toward higher margin software products. Oncology Systems service contract gross margin was 48.3% in fiscal year 2009, compared to 46.1% in fiscal year 2008, primarily due to cost control initiatives and higher volume in fiscal year 2009.

X-ray Products gross margin increased 1.0 percentage point in fiscal year 2010 over fiscal year 2009 primarily due to product mix shift toward higher margin products and higher sales volume. X-ray Products gross margin remained relatively flat in fiscal year 2009 compared to fiscal year 2008, with a gross margin improvement in x-ray tubes offset by a decrease in flat panel gross margin due to higher start up costs and quality costs for the new radiographic flat panels.

Research and Development

(Dollars in millions)	Fiscal Years 2010	% Change	2009	% Change	2008
Research and development	$ 157	6%	$ 147	9%	$ 136
As a percentage of total revenues	*7%*		*7%*		*7%*

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The $10 million increase in research and development expense for fiscal year 2010 over fiscal year 2009 was driven by increased expenses of $6 million in the Other category, $2 million in Oncology Systems and $2 million in X-ray Products. The $6 million increase in the Other category was primarily due to an increase in labor expenses, material costs and consulting expenses for research and development projects in Varian Particle Therapy and SIP. The $2 million increase in Oncology Systems was primarily attributable to an unfavorable impact when foreign-currency-denominated research and development expenses for Oncology Systems were translated into U.S. dollars in fiscal year 2010 compared to fiscal year 2009, when the U.S. dollar was relatively stronger against foreign currencies. The $2 million increase in X-ray Products was mainly due to higher development expenses for x-ray tube products.

The $11 million increase in research and development expense for fiscal year 2009 over fiscal year 2008 was driven by increased expenses of $6 million in Oncology Systems, $4 million in the Other category and $1 million in X-ray Products. The $6 million increase in Oncology Systems was primarily attributable to an increase in employee headcount, material costs and consulting expenses for product development, although these expenses were partially offset by a $4 million favorable impact, when foreign-currency-denominated research and development expenses for Oncology Systems were translated into U.S. dollars in fiscal year 2009 compared to fiscal year 2008 when the U.S. dollar was relatively weaker against foreign currencies. The $4 million increase in the Other category was primarily due to higher expense for development projects in Varian Particle Therapy and SIP. The $1 million increase in X-ray Products was mainly for development projects for both x-ray tubes and flat panel products.

Selling, General and Administrative

	Fiscal Years				
(Dollars in millions)	**2010**	**% Change**	**2009**	**% Change**	**2008**
Selling, general and administrative	$ 335	(1)%	$ 339	5%	$ 323
As a percentage of total revenues	*14%*		*15%*		*16%*

Selling, general and administrative expenses decreased in fiscal year 2010 compared to fiscal year 2009, primarily due to cost control initiatives. As a percentage of total revenues, selling, general and administrative expenses in fiscal year 2010 decreased one-percentage point from fiscal year 2009.

The $4 million decrease in selling, general and administrative expenses for fiscal year 2010 compared to fiscal year 2009 was primarily attributable to: (a) a $6 million decrease in accruals for contingent liabilities in the ordinary course of business; (b) a $5 million net decrease in certain commission and product promotion expenses for our Oncology Systems products and (c) a $5 million decrease in information technology expenses primarily due to the completion of the implementation of our enterprise resource planning system in the second quarter of fiscal year 2009. These decreases were partially offset by: (i) a $4 million increase in employee-related costs primarily related to increased accrued bonuses; (ii) a $3 million expense associated with reduction in force during fiscal year 2010; (iii) a $2 million decrease in net gain from hedging balance sheet exposures from our various foreign subsidiaries and business units; (iv) a $2 million increase in insurance expenses and (v) an unfavorable impact of $2 million when the foreign currency denominated selling, general and administrative expenses of our foreign operations were translated into U.S. dollars in fiscal year 2010 compared to fiscal year 2009, when the U.S. dollar was relatively stronger against foreign currencies.

The $16 million increase in selling, general and administrative expenses for fiscal year 2009 compared to fiscal year 2008 was primarily attributable to: (a) a $7 million increase in fees for certain commission arrangements and product promotions which were primarily tied to growth in Oncology Systems revenues; (b) a $5 million increase in depreciation expenses for our enterprise resource planning system that was placed in service in the second quarter of fiscal year 2009; (c) a $4 million increase in accruals for contingent liabilities in the ordinary course of business and (d) a $3 million net increase in employee-related costs that reflected increased headcount to support our growing business activities partially offset

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by a reduction in accrued bonuses and other cost control measures. These items were partially offset by a favorable impact of $5 million as the foreign currency denominated selling, general and administrative expenses of our foreign operations were translated into U.S. dollars in fiscal year 2009 compared to fiscal year 2008, when the U.S. dollar was relatively weaker against foreign currencies.

Interest Income, Net

	Fiscal Years				
(Dollars in millions)	**2010**	**% Change**	**2009**	**% Change**	**2008**
Interest income (expense), net	$ (1.3)	(357)%	$ 0.5	(92)%	$ 6.6

In fiscal year 2010, the net increase in interest expense, net of interest income, over fiscal year 2009 was primarily due to the lower average interest rates earned on our cash and cash equivalents.

In fiscal year 2009, the decrease in interest income, net of interest expense, over fiscal year 2008 was attributable to the lower average interest rates earned on our cash and cash equivalents.

Taxes on Earnings

	Fiscal Years				
	2010	**Change**	**2009**	**Change**	**2008**
Effective tax rate	31%	1%	30%	(1)%	31%

The increase in our effective tax rate in fiscal year 2010 from fiscal year 2009 was primarily due to a decrease in the benefit from discrete items in fiscal year 2010, including a smaller release of liabilities for uncertain tax positions as a result of settlements with taxing authorities and the expiration of the statutes of limitation in various jurisdictions, partially offset by an increase in the benefit from the foreign rate differential in fiscal year 2010.

The decrease in our effective tax rate in fiscal year 2009 compared to fiscal year 2008 was primarily due to a net benefit from discrete items, primarily the release of certain liabilities for uncertain tax positions, including the expiration of the statutes of limitation in various jurisdictions and the favorable resolution of several income tax audits, partially offset by a decrease in the benefit of the foreign tax rate differential.

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. Our future effective tax rate could be adversely affected by having lower earnings than anticipated in countries where we have lower statutory rates and higher earnings than anticipated in countries where we have higher statutory rates, by changes in the valuation of our deferred tax assets or liabilities, and by changes in tax laws or interpretations of those laws. For example, recent proposals would make significant changes U.S. taxation of U.S.-based multinational corporations. Although we cannot predict whether or in what form Congress would enact any such proposals, legislation of this type could have an adverse impact on our effective tax rate. We also expect that our effective tax rate may experience increased fluctuation from period to period under the provisions in ASC 740 related to accounting for uncertainty in income taxes. See Note 13, Income Taxes of the Notes to the Consolidated Financial Statements.

Net Earnings Per Diluted Share

	Fiscal Years				
	2010	**% Change**	**2009**	**% Change**	**2008**
Net earnings per diluted share	$ 2.96	12%	$ 2.65	15%	$ 2.31

The increase in earnings per diluted share in fiscal year 2010 over fiscal year 2009 resulted from (i) an increase in total revenues, (ii) an improvement in gross margin, (iii) a decrease in our operating expenses

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as a percent of revenues and (iv) a reduction in the number of diluted shares of common stock outstanding due to stock repurchases partially offset by an increase in effective tax rate.

The increase in earnings per diluted share in fiscal year 2009 over fiscal year 2008 resulted from (i) an increase in total revenues; (ii) an improvement in gross margin, (iii) leverage in our operating expenses, (iv) a reduction in our effective tax rate and (v) a reduction in the number of diluted shares of common stock outstanding due to stock repurchases and lower stock prices.

Net Orders

Total Net Orders (by segment and region)			**Fiscal Years**		
(Dollars in millions)	**2010**	**% Change**	**2009**	**% Change**	**2008**
Oncology Systems:					
North America	$ 985	4%	$ 949	(7)%	$ 1,020
Total International	1,091	16%	942	11%	851
Total Oncology Systems	$ 2,076	10%	$ 1,891	1%	$ 1,871
X-ray Products:					
North America	$ 115	3%	$ 111	(15)%	$ 131
Total International	304	33%	228	11%	206
Total X-ray Products	$ 419	24%	$ 339	1%	$ 337
Other:	$ 0	(100)%	$ 151	59%	$ 94
Total Net Orders	$ 2,495	5%	$ 2,381	3%	$ 2,302

Total net orders in fiscal year 2010 increased 5%, or 4% on a constant currency basis, from fiscal year 2009 which included the $62 million proton therapy system order from Skandion Kliniken (as described further below). Net order increases from Oncology Systems and X-ray Products were partially offset by net order decreases from Varian Particle Therapy and SIP. Including the $62 million proton therapy system order in Varian Particle Therapy, total net orders for fiscal year 2009 increased 3%, or 5% on a constant currency basis, over fiscal year 2008, with slight increases in Oncology Systems and X-ray Products net orders and a decline in SIP net orders. Beginning in the first quarter of fiscal year 2011, to avoid potentially confusing comparisons created by large and variable orders for our Varian Particle Therapy products, we will report orders by business rather than for the total company.

Oncology Systems net orders grew 10% in fiscal year 2010 over fiscal year 2009, compared to a 1% growth in fiscal year 2009 over fiscal year 2008. On a constant currency basis, Oncology Systems net orders grew 8% in fiscal year 2010 over fiscal year 2009, compared to 4% in fiscal year 2009 over fiscal year 2008.

Oncology Systems North American net orders increased 4% in fiscal year 2010 over fiscal year 2009, with growth in net orders in the second half of the fiscal year more than offsetting the net order decline in the first half of the fiscal year. Increased demand for our linear accelerators, driven by the new TrueBeam system, as well as increased demand for our service contracts, including software service agreements, were the primarily contributors to the Oncology Systems North American net order increase in fiscal year 2010 over fiscal year 2009. Oncology Systems international net orders increased 16%, or 13% on a constant currency basis, in fiscal year 2010 over fiscal year 2009 primarily due to increased demand for our linear accelerators (including the TrueBeam system and UNIQUE) and our software products, in Europe and Asia, as well as growth in demand for our service contracts in all international regions. The overall weaker U.S. dollar against foreign currencies in fiscal year 2010 compared to fiscal year 2009 favorably impacted Oncology Systems international net orders when measured in U.S. dollars.

For fiscal year 2009, the growth in Oncology Systems international net orders over fiscal year 2008 was significantly offset by the net order decrease in North America as this region was impacted by the

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recession, the uncertainty created by the prospects of healthcare reform and uncertainty in late fiscal year 2009 about the then proposed reduction in Medicare reimbursement rates for radiotherapy and radiosurgery at free-standing clinics and for physician reimbursement for radiation oncology. In North America, Oncology Systems experienced net order declines in most of its product lines in fiscal year 2009 over fiscal year 2008 while this region continued to experience growth in demand for service contracts. All international regions contributed to the growth in international Oncology Systems net orders in fiscal year 2009 over fiscal year 2008. Growth in our service contracts, as well as growth in demand for our software products in all international regions and our high energy linear accelerators in Europe and Asia, contributed to fiscal year 2009 growth in international Oncology Systems net orders over fiscal year 2008. The overall stronger U.S. dollar against foreign currencies in fiscal year 2009 compared to fiscal year 2008 negatively impacted Oncology Systems international net orders when measured in U.S. dollars. When measured in constant currency, international Oncology Systems net orders grew 16% in fiscal year 2009 over fiscal year 2008.

The trailing 12 months growth in net orders for Oncology Systems for the three immediately prior fiscal quarters ends were: a 3% total increase, with a 10% decrease in North America and an 18% increase for the international region, as of July 2, 2010; flat for total net orders, with a 14% decrease in North America and an 18% increase for the international region, as of April 2, 2010; a 1% total decrease, with an 11% decrease in North America and an 11% increase for the international region, as of January 1, 2010; Consistent with the historical pattern, we expect that Oncology Systems net orders will continue to experience regional fluctuations.

X-ray Products net orders grew 24% in fiscal year 2010 over fiscal year 2009, compared to 1% in fiscal year 2009 over fiscal year 2008. The growth in X-ray Products net orders in fiscal year 2010 was primarily due to increased demand for flat panel products, especially our radiographic flat panels, in North America, Europe and Asia, as well as increased demand for our x-ray tubes products in Asia. In fiscal year 2009, the increase in net orders over fiscal year 2008 for our flat panel detectors (including our radiographic imaging panels) was significantly offset by the decrease in net orders for x-ray tubes.

Net orders in the Other category declined $151 million in fiscal year 2010 over fiscal year 2009 primarily because Varian Particle Therapy booked the now-cancelled $62 million proton therapy system order from Skandion Kliniken in fiscal year 2009 but did not book a proton therapy order in fiscal year 2010. SIP also experienced a decrease in net orders in fiscal year 2010 compared to fiscal year 2009 as this business was negatively impacted by bid award challenges among competitors for a large government project in North America. We booked the order from Skandion Kliniken in the fourth quarter of fiscal year 2009 when Skandion Kliniken awarded us a contract to deliver and install a proton therapy system in Sweden following a public tender process, which was subsequently challenged by a competitor. After the Swedish court ruled in December 2009 that the tender should be recommenced, Skandion Kliniken cancelled the award with us in January 2010. In accordance with our order booking policy, we removed this order from our backlog in the first quarter of fiscal year 2010. In July 2010, Skandion Kliniken announced the award of the re-tender for its proton therapy facility to a competitor and we, along with another bidder, are currently challenging this award. For our Varian Particle Therapy business, we recognize orders when construction of the related proton therapy treatment center is reasonably expected to start within two years. Also, we only recognize orders for Varian Particle Therapy products with contingencies if we deem the contingencies perfunctory or if we publicly disclose the existence and nature of material contingencies. However, orders will not be recognized if there are major financing contingencies or customer board approval contingencies pending.

As the U.S economy stabilizes and uncertainty regarding healthcare reform and reimbursement rates subsides, we could experience a temporary increase in orders due to pent-up demand of customers, which in turn could increase the volatility of our orders and revenues. 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,

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acceptance schedules and the readiness of individual customer sites for installation of our products. Moreover, certain types of orders, such as software products 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.

Discontinued Operations

In the fourth quarter of fiscal year 2008, we approved a plan to sell Research Instruments to focus the business that we acquired from ACCEL exclusively on the development of our Varian Particle Therapy business. The sale of Research Instruments was completed in the second quarter of fiscal year 2009. Research Instruments has been classified as a discontinued operation in our Consolidated Statements of Earnings for all periods presented. Research Instruments was previously included in the Other category. In fiscal year 2010, we recognized an additional loss of $7.1 million for additional cost to settle one customer contract and estimated costs to complete and settle the other customer contract, both of which were related to the sale of Research Instruments. These contracts had been accounted for under the percentage-of-completion method, under which revenues and costs of sales are adjusted to reflect changes in estimated costs to complete the contracts. The percentage-of-completion method involves considerable use of estimates. If the estimated loss to complete or settle the remaining contract increases, the variance will be recognized in the periods these variances arise. Including the additional loss recognized for the two contracts, total losses of Research Instruments for fiscal year 2010 was $7.1 million, less applicable income tax of zero. Loss reported in discontinued operations for fiscal years 2009 and 2008 was $12.5 million and $15.8 million, respectively, less applicable income tax of zero. In fiscal year 2009, loss in discontinued operations included a loss of $8.1 million on the disposal of Research Instruments. In fiscal year 2008, loss from discontinued operations included goodwill impairment and impairment of long-lived assets related to Research Instruments. Total revenues of Research Instruments, reported in discontinued operations, for fiscal years 2010, 2009 and 2008 were $(3.6) million, $9.8 million and $35.2 million, respectively. See Note 15, Discontinued Operations to the Notes to the Consolidated Financial Statements for a detailed discussion.

Backlog

At October 1, 2010, our backlog (including the cancellation of the $62 million proton therapy system order from Skandion Kliniken) was $2.2 billion, which is an increase of 7% over the backlog at October 2, 2009. Our Oncology Systems backlog at October 1, 2010 was 12% higher than the backlog at October 2, 2009, which reflects a 13% increase for the international regions and an 11% increase for North America.

Liquidity and Capital Resources

Liquidity is the measurement of our ability to meet potential cash requirements, including ongoing commitments to repay borrowings, acquire businesses, repurchase VMS stock, and fund continuing operations. Our sources of cash have included operations, borrowings, stock option exercises and employee stock purchases (although no purchases under our employee stock purchase plan were made during fiscal year 2010) and interest income. Our cash usage is actively managed on a daily basis to ensure the maintenance of sufficient funds to meet our needs. Because Research Instruments cash flows were not material for any period presented, we have not segregated them from continuing operations on our Consolidated Statements of Cash Flows and the discussion herein.

Cash and Cash Equivalents

The following table summarizes our cash and cash equivalents:

(In millions)	October 1, 2010	October 2, 2009	Decrease
Cash and cash equivalents	$ 520	$ 554	$ (34)

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Our cash and cash equivalents decreased $34 million from $554 million at October 2, 2009 to $520 million at October 1, 2010. The decrease in cash and cash equivalents in fiscal year 2010 was due primarily to: $498 million used for the repurchase of VMS common stock, $68 million of capital expenditures, $23 million used for an equity forward contract related to an accelerated VMS common stock repurchase agreement, $9 million used for the repayment of bank borrowings and $8 million for tendered VMS common stock used to satisfy employee tax withholding requirements upon vesting of restricted common stock and restricted stock units. These decreases were partially offset by $460 million of cash generated from operating activities, $84 million of cash provided by stock option exercises, $16 million of cash provided by net borrowings under our credit facility and $15 million of cash provided by the excess tax benefits from share-based compensation. In addition, foreign currency exchange rate changes in fiscal year 2010 increased cash and cash equivalents by $3 million.

At October 1, 2010, we had approximately $39 million or 8%, of total cash and cash equivalents in the United States. Approximately $481 million, or 92%, of total cash and cash equivalents was held abroad and could be subject to additional taxation if it were repatriated to the United States. As of October 1, 2010, most of our cash and cash equivalents that were held abroad were in U.S. dollars and were primarily held as bank deposits. Because our cash levels in the United States are relatively low, 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, stock repurchases, acquisitions and other corporate purposes.

Cash Flows

	Fiscal Years		
(In millions)	**2010**	**2009**	**2008**
Net cash flow provided by (used in):			
Operating activities	$ 460	$ 305	$ 372
Investing activities	(75)	(78)	(88)
Financing activities	(422)	(71)	(142)
Effects of exchange rate changes on cash and cash equivalents	3	1	(8)
Net increase (decrease) in cash and cash equivalents	$ (34)	$ 157	$ 134

Our primary cash inflows and outflows for fiscal years 2010, 2009 and 2008 were as follows:

- We generated net cash from operating activities of $460 million in fiscal year 2010, compared to $305 million and $372 million in fiscal years 2009 and 2008, respectively.

The $155 million increase in net cash from operating activities during fiscal year 2010 compared to fiscal year 2009 was driven primarily by a net change of $63 million in operating assets and liabilities (working capital items), an increase in non-cash items of $51 million and an increase of $41 million in net earnings.

The major contributors to the net change in working capital items in fiscal year 2010 were inventories and advance payments from customers as follows:

- Inventories increased by $53 million due to anticipated customer demands for products in fiscal year 2011 in Oncology Systems, X-ray Products and Varian Particle Therapy.

- Advance payments from customers increased by $49 million due to increased orders, as well as receipt of a down payment for a proton therapy system not yet recognized in Net Orders as of the end of the third quarter.

The $67 million decrease in net cash from operating activities during fiscal year 2009 compared to fiscal year 2008 was driven primarily by a net change of $93 million in operating assets and liabilities (working capital items) and a decrease in non-cash items of $14 million, partially offset by an increase of $40 million in net earnings.

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The major contributors to the net change in working capital items in fiscal year 2009 were accounts receivable, inventories, other long-term liabilities, accrued expenses and advance payments from customers as follows:

- Accounts receivable increased $86 million due to higher revenues and an increase in DSO from the end of fiscal year 2008.
- Inventories increased by $40 million due to anticipated customer demands for products in fiscal year 2010 in all of our businesses.
- Other long-term liabilities decreased by $22 million primarily due to a decrease in long-term income taxes payable as a result of the expiration of the statutes of limitation in various jurisdictions and the favorable resolution of several income tax audits.
- Accrued expenses increased $47 million primarily due to an increase in income taxes payable.
- Advance payments from customers increased by $22 million due to an increase in volume of our Oncology Systems service contracts.

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 and customer acceptance, accounts receivable collections, inventory management, and the timing and amount of tax and other payments. See Item 1A, Risk Factors.

- Investing activities used $75 million of net cash in fiscal year 2010, $78 million in fiscal year 2009 and $88 million in fiscal year 2008. Cash used for purchases of property, plant and equipment was $68 million in fiscal year 2010, compared to $63 million and $81 million in fiscal years 2009 and 2008, respectively. In fiscal year 2009, we made an additional net loan advance of $6 million to dpiX. In fiscal year 2008, we also invested $8 million in a privately held company.

- Financing activities used net cash of $422 million in fiscal year 2010 compared to $71 million and $142 million in fiscal years 2009 and 2008, respectively. In fiscal year 2010, we used $498 million for the repurchases of common stock, compared to $101 million in fiscal year 2009 and $262 million in fiscal year 2008. In fiscal years 2010, 2009 and 2008, we used $9 million, $8 million and $9 million, respectively, to repay bank borrowings. In fiscal year 2010, we also used $23 million for an equity forward contract related to an accelerated VMS common stock repurchase agreement. In fiscal year 2008, we also used $41 million to repay borrowings under our credit facilities. Cash used for financing activities in fiscal years 2010, 2009 and 2008 also includes $8 million, $3 million and $1 million (the value of withheld shares), respectively, for tendered VMS common stock to satisfy employee tax withholding requirements upon vesting of restricted common stock and restricted stock units. These uses were partially offset by cash proceeds from employee stock option exercises and employee stock purchases of $84 million, $28 million and $129 million in fiscal years 2010, 2009 and 2008 respectively, as well as cash provided by excess tax benefits from share-based compensation of $15 million in fiscal year 2010, $10 million in fiscal year 2009 and $42 million in fiscal year 2008. In fiscal years 2010 and 2009, we also borrowed $16 million and $4 million, respectively, in net cash from our credit facilities.

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 3.0% of revenues in fiscal year 2011.

We have a $225 million credit facility with Bank of America, N.A. (BofA), which was amended and restated in November 2008 and then again amended in July 2009 and in August 2010. This credit facility, as amended to date, is referred to as the Amended BofA Credit Facility. A portion of the Amended BofA Credit Facility is collateralized with a pledge of stock of certain of VMS s present and future

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subsidiaries that are deemed to be material subsidiaries. As of October 1, 2010, VMS has pledged to BofA 65% of the voting shares that it holds in Varian Medical Systems Nederland B.V., a wholly-owned subsidiary. Under the Amended BofA Credit Facility, VMS s Japanese subsidiary (VMS KK) can borrow up to 2.7 billion Japanese Yen as part of the overall credit facility (the Japanese Line of Credit). At any time amounts are outstanding under the Japanese Line of Credit, the full borrowing capacity is deemed committed for use in Japan and therefore the maximum amount VMS can otherwise borrow under the Amended BofA Credit Facility will be reduced by $35 million to $190 million. VMS guarantees the payment of the outstanding balance under the Japanese Line of Credit.

The Amended BofA Credit Facility may be used for: working capital; capital expenditures; permitted acquisitions; and other lawful corporate purposes. Borrowings under the Japanese Line of Credit can be used by VMS KK for refinancing certain intercompany debts, working capital, capital expenditures and other lawful corporate purposes. Borrowings under the Amended BofA Credit Facility (outside of the Japanese Line of Credit) accrue interest either: (i) based on LIBOR plus a margin of 1.25% to 1.50% based on a leverage ratio involving funded indebtedness and earnings before interest, taxes, depreciation and amortization (EBITDA)- or (ii) based upon a base rate of either the federal funds rate plus 0.5% or BofA s announced prime rate, whichever is greater, minus a margin of 0.5% to 0% based on a leverage ratio involving funded indebtedness and EBITDA (depending upon our instructions to BofA). We may select borrowing periods of one, two, three or six months for advances based on the LIBOR rate. Interest rates on advances based on the base rate are adjustable daily. Under the Amended BofA Credit Facility, we pay commitment fees at an annual rate of 0.2% to 0.3% based on a leverage ratio involving funded indebtedness and EBITDA. Borrowings under the Japanese Line of Credit accrue interest at the basic loan rate announced by the Bank of Japan plus a margin of 1.25% to 1.50% based on a leverage ratio involving funded indebtedness and EBITDA. The Amended BofA Credit Facility, as well as the Japanese Line of Credit, will expire on November 10, 2011, if not extended by mutual agreement of VMS and BofA,.

As of October 1, 2010, $20 million was outstanding under the Amended BofA Credit Facility with a weighted average interest rate of 1.51% and none of which was outstanding under the Japanese Line of Credit. During fiscal year 2010, the amount outstanding under the Amended BofA Credit Facility (including the Japanese Line of Credit) reached approximately $177 million, which was primarily used to finance an accelerated share repurchase agreement executed in August 2010 (described further below under Stock Repurchase Program.) The Amended BofA Credit Facility contains customary affirmative and negative covenants for facilities of this type. We have also agreed to maintain certain financial covenants relating to: (i) leverage ratios involving funded indebtedness and EBITDA; (ii) liquidity; and (iii) consolidated assets. As of October 1, 2010, we were in compliance with all covenants. See also Note 7 Credit Facility to the Consolidated Financial Statements for a discussion regarding the Amended BofA Credit Facility.

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. 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 and repurchase VMS common stock.

Total debt as a percentage of total capital increased to 3.3% at October 1, 2010 from 2.7% at October 2, 2009. The ratio of current assets to current liabilities decreased to 1.86 to 1 at October 1, 2010 from 1.99 to 1 at October 2, 2009.

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Days Sales Outstanding

Trade accounts receivable DSO were 82 days at October 1, 2010 compared to 81 days at October 2, 2009 Our accounts receivable and DSO are impacted by a number of factors, including primarily: the timing of product shipments, collections performance, payment terms, and the mix of revenues from different regions. As of October 1, 2010, less than 1% of our accounts receivable balance was related to customer contracts with extended payment terms of more than one year.

Stock Repurchase Program

During fiscal years 2010, 2009 and 2008, we paid $498 million, $101 million and $262 million, respectively, to repurchase 9,788,249 shares, 2,248,000 shares and 5,110,000 shares, respectively, of VMS common stock under various authorizations by VMS s Board of Directors. Shares may be repurchased in the open market or in privately negotiated transactions or under Rule 10b5-1 share repurchase plans and may be made from time to time in one or more large blocks.

The fiscal year 2010 repurchase amounts include shares of VMS common stock repurchased under an accelerated share repurchase agreement executed on August 24, 2010 with BofA (the Repurchase Agreement). Pursuant to the Repurchase Agreement, we paid to BofA $225 million and BofA delivered 3,888,249 shares of VMS common stock, representing approximately 90% of the shares to be repurchased based on the closing price of VMS common stock of $52.08 on August 24, 2010. The specific number of shares that we ultimately will repurchase under the Repurchase Agreement will be based on the volume weighted average share price of VMS common stock during the repurchase period, less a discount. The repurchase period will end on February 23, 2011, provided that BofA has the right to accelerate the end of the repurchase period beginning on December 20, 2010. At the completion of the repurchase period, depending on the volume weighted average share price of VMS common stock during the repurchase period, we may be entitled to receive additional shares of VMS common stock from BofA or we may be required to deliver VMS shares or, at our option, make a cash payment to BofA. The remaining $22.5 million, representing approximately 10% of the cash payment to BofA, was recorded as an equity forward contract, which was included in Capital in excess of par value in the Consolidated Balance Sheet at October 1, 2010.

All shares that have been repurchased have been retired. An authorization expired on December 31, 2009 with 6,050,000 shares available for repurchase. As of October 1, 2010, 4,461,751 shares of VMS common stock remained available for repurchase under an authorization that expires on September 30, 2011.

Contractual Obligations

The following summarizes our contractual obligations as of October 1, 2010 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 2011	Fiscal Years 2012 - 2013	Fiscal Years 2014 - 2015	Beyond	Total
Short-term borrowings(1)	$ 20.0	$	$	$	$ 20.0
Long term debt(2)	5.5	11.6	6.3		23.4
Interest obligation on long term debt	1.5	1.3	0.3		3.1
Operating leases(3)	14.5	17.8	9.5	4.4	46.2
Defined benefit pension plans(4)	6.6				6.6
Post-retirement benefit plan(5)	0.5	1.0	1.0	2.5	5.0
Total(6)	$ 48.6	$ 31.7	$ 17.1	$ 6.9	$ 104.3

(1) Short-term borrowings were outstanding under the Amended BofA Credit Facility with a weighted average interest rate of 1.51%. See a detailed discussion of our credit facilities in Note 7, Credit Facility of the Notes to the Consolidated Financial Statements.

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(2) Long-term debt, including current maturities, decreased $9 million from October 2, 2009 due to principal repayments. The fixed interest rates on the outstanding debt on this date ranged from 6.70% to 7.58% with a weighted average interest rate of 6.89%. As of October 1, 2010, land and buildings with a carrying amount of $13.1 million were pledged as collateral against certain loans we assumed related to purchases of land and buildings in Las Vegas. For further discussion regarding long-term debt, see Note 6, Long-term Debt of the Notes to the Consolidated Financial Statements.

(3) Operating leases include future minimum lease payments under all our noncancelable operating leases as of October 1, 2010.

(4) As further described in Note 10, Retirement Plans of the Notes to the Consolidated Financial Statements, as of October 1, 2010, our defined benefit pension plans were underfunded by $28.0 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 to fund its defined benefit pension plans beyond the next fiscal year.

(5) As further described in Note 10, Retirement Plans of the Notes to the Consolidated Financial Statements, as of October 1, 2010, our post-retirement benefit plan had an estimated total benefit obligation of $5.9 million. Due to changes in health care cost trend rates, mortality rates of plan participants, and the potential for us to change the type of health care plans offered or the level of contributions from plan participants, we are not able to reasonably estimate the timing and amount of contributions to fund its post-retirement benefit plan beyond fiscal year 2020.

(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 October 1, 2010, our liability for uncertain tax positions was $56.8 million and we do not anticipate payment of these amounts in the next 12 months. We are unable to reliably estimate the timing of future payments related to uncertain tax positions; therefore, the liability for uncertain tax positions has been excluded from the table above. See a detailed discussion in Note 13, Taxes on Earnings of the Notes to the Consolidated Financial Statements.

- In February 2009, we agreed to loan an aggregate amount of $14 million to dpiX. As of October 1, 2010, we had loaned $8.8 million to dpiX and had outstanding commitment to loan an additional $5.2 million under this agreement. We do not know the timing of the funding of the remaining $5.2 million. See detailed discussion in Note 5, Related Party Transactions of the Notes to the Consolidated Financial Statements.

- As further described in Note 9, Commitment and Contingencies of the Notes to the Consolidated Financial Statements, as of October 1, 2010, we accrued $13.5 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 become more clearly defined.

- As discussed above under Share Repurchase Program, we entered into the Repurchase Agreement with BofA to repurchase $225 million of VMS common stock on August 24, 2010. As of October, we received 3,888,249 shares of VMS common stock under the Repurchase Agreement. The specific number of shares that we ultimately will repurchase under the Repurchase Agreement will be based on the volume weighted average share price of VMS common stock during the repurchase period, which will end between December 20, 2010 and February 23, 2011. We may be entitled to receive additional shares of VMS common stock from BofA or we may be required, at its option, to deliver VMS shares or make a cash payment to BofA.

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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.

Acquisition-Related Commitments/Obligations

When we acquired ACCEL in January 2007, ACCEL was involved in a contract-related lawsuit, which we settled by agreeing to perform certain services for a fixed price contract (the Fixed Price Contract). As of October 2, 2009, we had a loss accrual of 7.6 million in relation to the Fixed Price Contract. In the first quarter of fiscal year 2010, we entered into a new contract (the New Contract) to perform certain services for a fixed price and we recorded a loss accrual of 0.9 million in connection with the New Contract. As of October 1, 2010, the balance of the loss accrual related to this contingency (the New Contract) was 0.3 million. If the actual costs related to the contingency exceed the estimated amount or if the estimated loss increases, the variances will be recognized in the Consolidated Statements of Earnings in the periods in which these variances arise.

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 in 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. 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. While we cannot assure you as to the ultimate outcome of any legal proceeding or other loss contingency involving us, management does not believe any pending matter will be resolved in a manner that would have a material adverse effect on our consolidated financial position, results of operations or cash flows. However, it is possible that a legal or other proceeding brought against us could have an impact of this nature.

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 October 1, 2010, 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.

Recent Accounting Pronouncements

In December 2008, the FASB issued new guidance under Accounting Standards Codification (ASC) 715-20, which provides guidance on an employer s disclosure about plan assets of a defined benefit

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pension or other post-retirement plan and requires employers to disclose information about fair value measurements of plan assets. The new guidance under ASC 715-20 was effective for us as of the end of fiscal year 2010. The adoption of the new guidance concerns disclosure did not have an impact on our consolidated financial position, results of operations or cash flows.

In June 2009, the FASB issued the consolidation guidance for variable-interest entities to replace the quantitative-based risks and rewards calculation for determining which enterprise, if any, has a controlling financial interest in a variable-interest entity with an approach focused on identifying which enterprise has the power to direct the activities of a variable-interest entity that most significantly impact the entity s economic performance. The new guidance will be effective for us in the first quarter of fiscal year 2011. We do not expect the adoption of the new guidance will have a material impact on our existing consolidated financial position, results of operations and cash flows.

In March 2010, the FASB issued the guidance related to the Milestone Method of Revenue Recognition (ASU 2010-17), which recognizes the milestone method as an acceptable revenue recognition method for substantive milestones in research or development transaction. ASU 2010-17 is effective for us in the first quarter of fiscal year 2011, with early adoption permitted. We do not expect the adoption of the new guidance will have a material impact on our consolidated financial position, results of operations and cash flows.

In July 2010, the FASB issued ASU 2010-20 to provide guidance to enhance disclosures related to the credit quality of a company s financing receivables portfolio and the associated allowance for credit losses. Pursuant to this accounting guidance, a company is required to provide a greater level of disaggregated information about its allowance for credit loss with the objective of facilitating users evaluation of the nature of credit risk inherent in the company s portfolio of financing receivables, how that risk is analyzed and assessed in arriving at the allowance for credit losses, and the changes and reasons for those changes in the allowance for credit losses. The revised disclosures as of the end of the reporting period will be effective for us beginning in the first quarter of fiscal year 2011, and the revised disclosures related to activities during the reporting period will be effective for us beginning in the second quarter of fiscal year 2011. We are currently evaluating the impact of this accounting update on its financial statement disclosures.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

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

Credit 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. 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 the credit facility described below. 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 economic downturn and accompanying contraction in the credit markets heighten these risks.

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 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.

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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. The foreign currency sales transactions that fit our risk management policy criteria are hedged with 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 forward contracts for speculative or trading purposes. The forward contracts range from one to twelve 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 U.S. dollar functional currency.

The notional amounts of 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 forward exchange contracts outstanding at October 1, 2010 were as follows:

(In millions)	Notional Value Sold	Notional Value Purchased	Weighted Average Contract Rate (Foreign Currency Units per USD)
Australian dollar	$ 19.7	$	1.0349
British pound	3.3	9.9	0.6319
Canadian dollar		1.5	1.0236
Danish krone	0.6	2.7	5.4170
Euro	131.5	3.0	0.7273
Indian rupee	2.4		44.9400
Japanese yen	79.0		83.7236
New Zealand dollar	2.2		1.3477
Norwegian kron	0.7		5.8435
Swedish krona		2.6	6.7170
Swiss franc		50.0	0.9758
Totals	$ 239.4	$ 69.7	

Interest Rate Risk

Our market risk exposure to changes in interest rates depends primarily on our investment portfolio and short-term borrowings. Our investment portfolio consisted of cash and cash equivalents as of October 1, 2010. The principal amount of cash and cash equivalents at October 1, 2010 totaled $520 million with a weighted average interest rate of 0.23%.

The Amended BofA Credit Facility (including the Japanese Line of Credit) allows us to borrow up to a maximum amount of $225 million. We collateralized a portion of the Amended BofA Credit Facility with a pledge of 65% of the voting shares that we hold in Varian Medical Systems Nederland B.V., a wholly-owned subsidiary. Borrowings under the Amended BofA Credit Facility (outside of the Japanese Line of Credit) accrue interest based on the LIBOR, the federal funds rate, or the BofA s prime rate plus a margin. Borrowings under the Japanese Line of Credit accrue interest at the basic loan rate announced by the Bank of Japan plus a margin.

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We are affected by market risk exposure primarily through the effect of changes in interest rates on amounts payable under the Amended BofA Credit Facility (including the Japanese Line of Credit). As of October 1, 2010, the amount outstanding under the Amended BofA Credit Facility was $20 million, none of which was outstanding under the Japanese Line of Credit, with interest being accrued on LIBOR plus a margin. If the amount outstanding under the Amended BofA Credit Facility remained at this level for an entire year and the LIBOR increased or decreased, respectively, by 1%, our annual interest expense would increase or decrease, respectively, by an additional $200,000. See a detailed discussion of the Amended BofA Credit Facility in Item 7, MD&A- Liquidity and Capital Resources.

In addition, we had $23.4 million of long-term debt (including the current maturities of long term debt) outstanding at October 1, 2010 that carried at a weighted average fixed interest rate of 6.9% with principal payments due in various installments over a four-year period. To date, we have not used derivative financial instruments to hedge the interest rate of our investment portfolio, short-term borrowings or long-term debt, but may consider the use of derivative instruments in the future.

The table below presents principal amounts and related weighted average interest rates by year for our cash and cash equivalents, short-term borrowings and long term debt.

	Fiscal Years						
(Dollars in millions)	**2011**	**2012**	**2013**	**2014**	**2015**	**Thereafter**	**Total**
Assets:							
Cash and cash equivalents	$ 520.2	$	$	$	$	$	$ 520.2
Average interest rate(1)	0.23%						0.23%
Liabilities:							
Long-term debt	$ 5.5	$ 11.6	$	$ 6.3	$	$	$ 23.4
Average interest rate	6.80%	7.03%		6.70%			6.89%
Short-term borrowing under credit facilities	$ 20.0	$	$	$	$	$	$ 20.0
Average interest rate(1)	1.51%						1.51%

(1) Represents interest rates effective as of October 1, 2010.

The estimated fair value of our cash and cash equivalents and the estimated fair value of our short-term borrowings under the credit facility approximated the principal amounts reflected above based on the maturities of these financial instruments.

The fair value of our long-term debt was estimated based on the current rates available to us for debt of similar terms and remaining maturities. Under this method, the fair value of our debt was estimated to be $25.4 million at October 1, 2010. We determined the estimated fair value amount by using available market information and commonly accepted valuation methodologies. However, considerable judgment is required in interpreting market data to develop estimates of fair value. Accordingly, the fair value estimate presented herein is not necessarily indicative of the amount that we or holders of the instruments could realize in a current market exchange. The use of different assumptions and/or estimation methodologies may have a material effect on the estimated fair value.

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.

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Item 8. Financial Statements and Supplementary Data

VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF EARNINGS

(In thousands, except per share amounts)	Fiscal Years Ended 2010	2009	2008
Revenues:			
Product	$ 1,813,646	$ 1,766,929	$ 1,689,724
Service contracts and other	542,939	447,131	380,006
Total revenues	2,356,585	2,214,060	2,069,730
Cost of revenues:			
Product	1,055,150	1,013,973	985,133
Service contracts and other	275,793	239,582	207,065
Total cost of revenues	1,330,943	1,253,555	1,192,198
Gross margin	1,025,642	960,505	877,532
Operating expenses:			
Research and development	156,748	147,375	135,599
Selling, general and administrative	334,692	338,984	322,529
Total operating expenses	491,440	486,359	458,128
Operating earnings	534,202	474,146	419,404
Interest income	2,831	4,594	11,498
Interest expense	(4,108)	(4,097)	(4,879)
Earnings from continuing operations before taxes	532,925	474,643	426,023
Taxes on earnings	165,444	143,167	130,767
Earnings from continuing operations	367,481	331,476	295,256
Loss from discontinued operations, net of taxes	(7,059)	(12,454)	(15,772)
Net Earnings	$ 360,422	$ 319,022	$ 279,484
Net earnings (loss) per share basic:			
Continuing operations	$ 3.02	$ 2.67	$ 2.37
Discontinued operations	(0.06)	(0.10)	(0.13)
Net earnings per share	$ 2.96	$ 2.57	$ 2.24
Net earnings (loss) per share diluted:			
Continuing operations	$ 2.96	$ 2.65	$ 2.31
Discontinued operations	(0.05)	(0.10)	(0.12)
Net earnings per share	$ 2.91	$ 2.55	$ 2.19

Shares used in the calculation of net earnings per share:				
Weighted average shares outstanding	Basic	121,816	124,034	124,800
Weighted average shares outstanding	Diluted	124,025	124,995	127,604

See accompanying notes to the consolidated financial statements.

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(In thousands, except par values)	October 1, 2010	October 2, 2009
Assets		
Current assets:		
Cash and cash equivalents	$ 520,221	$ 553,529
Accounts receivable, net of allowance for doubtful accounts of $4,209 at October 1, 2010 and $4,347 at October 2, 2009	591,677	580,918
Inventories	363,933	321,861
Prepaid expenses and other current assets	87,267	71,751
Deferred tax assets	118,246	144,392
Total current assets	1,681,344	1,672,451
Property, plant and equipment, net	267,927	264,060
Goodwill	208,451	210,346
Other assets	166,230	161,391
Total assets	$ 2,323,952	$ 2,308,248
Liabilities and Stockholders Equity		
Current liabilities:		
Accounts payable	$ 119,018	$ 116,093
Accrued expenses	287,851	304,402
Product warranty	53,233	50,823
Deferred revenues	141,916	130,588
Advance payments from customers	275,998	226,964
Short-term borrowings	20,000	4,445
Current maturities of long-term debt	5,525	9,005
Total current liabilities	903,541	842,320
Long-term debt	17,869	23,394
Other long-term liabilities	127,175	130,751
Total liabilities	1,048,585	996,465
Commitments and contingencies (Note 9)		
Stockholders equity:		
Preferred stock of $1 par value: 1,000 shares authorized; none issued and outstanding		
Common stock of $1 par value: 189,000 shares authorized; 118,007 and 125,281 shares issued and outstanding at October 1, 2010 and at October 2, 2009, respectively	118,007	125,281
Capital in excess of par value	508,366	516,478
Retained earnings	686,598	696,409
Accumulated other comprehensive loss	(37,604)	(26,385)
Total stockholders equity	1,275,367	1,311,783
Total liabilities and stockholders equity	$ 2,323,952	$ 2,308,248

See accompanying notes to the consolidated financial statements.

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)	Fiscal Years Ended 2010	2009	2008
Cash flows from operating activities:			
Net earnings	$ 360,422	$ 319,022	$ 279,484
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Share-based compensation expense	39,814	42,577	40,994
Tax benefits from exercises of share-based payment awards	18,282	8,270	45,656
Excess tax benefits from share-based compensation	(15,072)	(9,639)	(42,020)
Depreciation	44,973	41,008	32,247
Amortization of intangible assets	3,320	3,601	4,462
Deferred taxes	30,111	(22,008)	3,097
Provision for doubtful accounts receivable	1,319	2,038	250
Net change in fair value of derivatives and underlying commitments	(5)	1,920	2,200
(Income) loss on equity investment in affiliate	732	905	(286)
Impairment loss on long-lived assets and goodwill			3,324
Loss on sale of Research Instruments		8,062	
Other	1,081	(3,334)	(2,391)
Changes in assets and liabilities:			
Accounts receivable	(12,874)	(86,012)	21,978
Inventories	(53,328)	(39,575)	(56,062)
Prepaid expenses and other current assets	(13,753)	(3,495)	(36,806)
Accounts payable	2,959	6,042	10,462
Accrued expenses	1,023	47,139	3,045
Product warranty	1,843	(1,492)	14
Deferred revenues	11,328	(10,819)	39,529
Advance payments from customers	49,201	22,349	23,038
Other long-term liabilities	(10,590)	(22,126)	12
Net cash provided by operating activities	460,786	304,433	372,227
Cash flows from investing activities:			
Purchases of property, plant and equipment	(67,545)	(62,562)	(81,424)
Equity and cost investments			(7,783)
(Increase) decrease in cash surrender value of life insurance	591	(2,505)	4,330
Acquisition of businesses, net of cash acquired	(1,800)	(2,550)	(2,092)
Notes repayment (receivable) from affiliate and other	271	(5,662)	(315)
Other	(6,332)	(4,627)	(301)
Net cash used in investing activities	(74,815)	(77,906)	(87,585)
Cash flows from financing activities:			
Repurchases of common stock	(497,500)	(101,485)	(261,558)
Equity forward contract	(22,500)		
Proceeds from issuance of common stock to employees	84,431	27,825	128,743
Excess tax benefits from share-based compensation	15,072	9,639	42,020
Employees tax withheld and paid for restricted stock and restricted stock units	(8,034)	(3,193)	(1,134)
Repayments on bank borrowings	(9,005)	(7,987)	(8,971)
Net borrowings (repayments) under line of credit agreements	15,598	4,171	(41,000)
Other	(237)	(251)	(176)

Net cash used in financing activities	(422,175)	(71,281)	(142,076)
Effects of exchange rate changes on cash and cash equivalents	2,896	977	(8,506)
Net increase (decrease) in cash and cash equivalents	(33,308)	156,223	134,060
Cash and cash equivalents at beginning of fiscal year	553,529	397,306	263,246
Cash and cash equivalents at end of fiscal year	$ 520,221	$ 553,529	$ 397,306

See accompanying notes to the consolidated financial statements.

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY

AND COMPREHENSIVE EARNINGS

	Common Stock					
(In thousands)	**Shares**	**Amount**	**Capital in Excess of Par Value**	**Retained Earnings**	**Accumulated Other Comprehensive Loss**	**Total**
Balances at September 28, 2007	**125,215**	**$ 125,215**	**$ 311,411**	**$ 395,742**	**$ (10,913)**	**$ 821,455**
Net earnings				279,484		279,484
Currency translation adjustment					29	29
Unrealized loss on derivatives, net of taxes of $307					(487)	(487)
Defined benefit pension and post-retirement benefit plans:						
Net loss arising during the year, net of taxes of $2,675					(7,473)	(7,473)
Amortization of transition obligation, net of taxes of $191					304	304
Amortization of prior service cost, net of taxes of $19					127	127
Amortization and settlement of net actuarial loss, net of taxes of $144					185	185
Comprehensive earnings						272,169
Adoption of the provisions in ASC 740 relating to accounting for uncertainty in income taxes				(19,064)		(19,064)
Issuance of common stock	4,973	4,973	123,770			128,743
Tax benefits from exercises of share-based payment awards			45,656			45,656
Issuance of common stock in settlement of deferred stock units and restricted stock, net of shares withheld for employee taxes and cancellation	512	512	(1,646)			(1,134)
Share-based compensation expense			40,918			40,918
Repurchases of common stock	(5,110)	(5,110)	(51,725)	(204,723)		(261,558)
Balances at September 26, 2008	**125,590**	**125,590**	**468,384**	**451,439**	**(18,228)**	**1,027,185**
Net earnings				319,022		319,022
Currency translation adjustment					2,362	2,362
Reclassification of foreign currency translation resulting from the sale of Research Instruments					(778)	(778)
Unrealized gain on derivatives:						
Increase in unrealized gain, net of taxes of $2,616					4,164	4,164
Reclassification adjustments, net of taxes of $2,310					(3,677)	(3,677)
Defined benefit pension and post-retirement benefit plans:						
Net loss arising during the year, net of taxes of $2,352					(11,265)	(11,265)
Amortization of transition obligation, net of taxes of $191					301	301
Amortization of prior service cost, net of taxes of $19					132	132
Amortization and settlement of net actuarial loss, net of taxes of $287					535	535
Comprehensive earnings						310,796
Adoption of measurement date provision of ASC 715				(122)	69	(53)
Issuance of common stock	1,500	1,500	26,325			27,825
Tax benefits from exercises of share-based payment awards			8,270			8,270
Issuance of common stock in settlement of deferred stock units and restricted stock, net of shares withheld for employee taxes and cancellation	439	439	(3,631)			(3,192)
Share-based compensation expense			42,437			42,437
Repurchases of common stock	(2,248)	(2,248)	(25,307)	(73,930)		(101,485)
Balances at October 2, 2009	**125,281**	**125,281**	**516,478**	**696,409**	**(26,385)**	**1,311,783**
Net earnings				360,422		360,422
Currency translation adjustment					(4,681)	(4,681)

Unrealized gain on derivatives:						
Increase in unrealized gain, net of taxes of $165					260	260
Reclassification adjustments, net of taxes of $360					(567)	(567)
Defined benefit pension and post-retirement benefit plans:						
Net loss arising during the year, net of taxes of $1,293					(7,750)	(7,750)
Amortization of transition obligation, net of taxes of $28					44	44
Amortization of prior service cost, net of taxes of $18					135	135
Amortization of net actuarial loss, net of taxes of $402					1,340	1,340
Comprehensive earnings						349,203
Issuance of common stock	2,651	2,651	81,780			84,431
Tax benefits from exercises of share-based payment awards			18,282			18,282
Issuance (Retirement) of common stock in settlement of deferred stock units, restricted stock units and restricted stock, net of shares withheld for employee taxes and cancellation	(137)	(137)	(7,897)			(8,034)
Share-based compensation expense			39,702			39,702
Equity forward contract			(22,500)			(22,500)
Repurchases of common stock	(9,788)	(9,788)	(117,479)	(370,233)		(497,500)
Balances at October 1, 2010	**118,007**	**$ 118,007**	**$ 508,366**	**$ 686,598**	**$ (37,604)**	**$ 1,275,367**

See accompanying notes to the consolidated financial statements.

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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 equipment and software products for treating cancer with radiotherapy, stereotactic radiosurgery and brachytherapy. The Company also designs, manufactures, sells and services x-ray tubes for original equipment manufacturers (OEMs); replacement x-ray tubes; and flat panel digital image detectors for filmless x-rays imaging in medical, dental, veterinary, scientific and industrial applications. It designs, manufactures, sells and services linear accelerators, digital image detectors, image processing software and image detection products for security and inspection purposes. The Company also develops, designs, manufacturers, sells and services proton therapy products and systems for cancer treatment.

Basis of Presentation

The consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States (GAAP). As discussed in Note 15 Discontinued Operations, the Company has classified the assets and liabilities of the scientific research instruments business (Research Instruments) of ACCEL Instruments GmbH (ACCEL, which has since changed its name to Varian Medical Systems Particle Therapy GmbH) as discontinued operations in the Consolidated Balance Sheets and presented its operating results as a discontinued operation in the Consolidated Statements of Earnings for all periods presented. Because amounts related to Research Instruments in the Consolidated Statements of Cash Flows and in the Consolidated Statements of Stockholders Equity and Comprehensive Earnings were not material for any period presented, the Company has not segregated them from continuing operations. Unless noted otherwise, discussion in these notes pertains to the Company s continuing operations.

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 2010 was the 52-week period that ended on October 1, 2010. Fiscal year 2009 was the 53-week period that ended on October 2, 2009 and fiscal year 2008 was the 52-week period that ended on September 26, 2008.

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). 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.)

Principles of Consolidation

The consolidated financial statements include those of VMS and its subsidiaries. Intercompany balances, transactions and stock holdings have been eliminated in consolidation.

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

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.

Fair Value of Financial Instruments

The carrying amounts of the Company s cash and cash equivalents, accounts receivable, net of allowance for doubtful accounts, accounts payable and short-term borrowings, approximate fair value due to their short maturities.

Foreign Currency Translation

For foreign subsidiaries where the U.S. dollar is the functional currency, gains and losses from remeasurement of foreign currency financial statements 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 financial statements into U.S. dollars, that were included in the Consolidated Statements of Earnings, were $1.1 million, $8.5 million and ($1.0) million in fiscal years 2010, 2009 and 2008, 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. Cumulative currency translation adjustments were a loss of $0.5 million as of October 1, 2010, a gain of $4.2 million at October 2, 2009 and a gain of $2.6 million as of September 26, 2008.

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.

Investments in Privately Held Companies

Except for the investment in dpiX Holding LLC (dpiX Holding), investments in privately held companies are accounted for under the cost method. The Company s investment in dpiX Holding is accounted for under the equity method. The Company s investments are included in Other assets in the Consolidated Balance Sheets and are carried at cost. The Company monitors these 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 Company did not have any impairment loss on investments in privately held companies for fiscal years 2010, 2009 and 2008.

Concentration of Credit Risk

Financial instruments that potentially expose the Company to concentrations of credit risk consist principally of cash, cash equivalents, trade accounts receivable and derivative financial instruments used in hedging activities. The Company is exposed to credit loss in the event of nonperformance by counterparties on the foreign currency forward contracts used in hedging activities. The Company

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

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. 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. 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 typically requires a down payment before shipments of products. 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) and 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 internally developed software during the application development stage are capitalized in accordance with Accounting Standards Codification (ASC) 350-40. 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 estimated useful lives or remaining lease terms. Buildings are depreciated over twenty 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 estimated useful lives or 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 are included in operating earnings.

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 over their estimated useful lives of approximately one to twenty years using the straight-line method.

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

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

undiscounted cash flows, the Company recognizes an impairment loss based on the excess of the carrying amount over the fair value of the assets. For assets held for sale, the Company assesses these assets for impairment based on their fair values less cost to sell. If the carrying value of the assets held for sale exceeds the fair value less cost to sell, the Company recognizes an impairment loss based on the excess of the carrying amount over the fair value of the assets less cost to sell. In fiscal year 2008, the Company recognized an impairment charge of $2.7 million for the impairment of long-lived assets of Research Instruments, which was sold in the second quarter of fiscal year 2009. See Note 15 Discontinued Operations for a detailed discussion. The Company did not recognize any impairment charges in fiscal years 2010 and 2009.

In accordance with ASC 350, 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. 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 the present value of estimated future cash flows of the reporting units. The Company determines the fair value of businesses held for sale based on the expected selling prices of the businesses. 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 the fourth quarter of fiscal year 2008, the Company performed a goodwill impairment test for Research Instruments, which became a business held for sale in the fourth quarter of fiscal year 2008, and recognized a goodwill impairment charge of $0.6 million. In the fourth quarter of fiscal years 2008, 2009 and 2010, the Company also performed the annual goodwill impairment testing as of the end of the third quarter of each fiscal year for the four remaining reporting units that carried goodwill, Oncology Systems, X-ray Products, Security and Inspection Products (SIP) and Varian Particle Therapy (the business of ACCEL that remained after the sale of Research Instruments), and found no impairment. Based on the most recent annual goodwill impairment testing that we performed in the fourth quarter of fiscal year 2010 for each of our four reporting units with goodwill (Oncology Systems, X-ray Products, SIP and Varian Particle Therapy), the fair value of each such reporting unit was substantially in excess of its carrying value.

Environmental Remediation Liabilities

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. The Company records these liabilities in accordance with ASC 410-30.

Revenue Recognition

The Company s revenues are derived primarily from the sale of hardware and software products, and related services and contracts from the Company s Oncology Systems, X-ray Products, SIP and Varian Particle Therapy businesses. The Company recognizes its revenues net of any value added or sales tax and net of sales discounts.

In October 2009, the Financial Accounting Standards Board (FASB) amended the scope of its software revenue guidance to exclude tangible products containing software components and

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

non-software components that function together to deliver the tangible product s essential functionality. In October 2009, the FASB also amended its accounting guidance for multiple deliverable revenue arrangements to provide updated guidance on whether multiple deliverables in a revenue arrangement exist, how the deliverables in an arrangement should be separated and how the consideration should be allocated. This guidance requires an entity to allocate consideration in an arrangement using estimated selling prices (ESP) of deliverables if a vendor does not have vendor-specific objective evidence (VSOE) of selling price or third-party evidence of selling price (TPE), eliminates the use of the residual method for non-software products and requires an entity to allocate consideration using the relative selling price method.

At the beginning of its second quarter of fiscal year 2010, the Company elected to early adopt the amended software revenue guidance and amended multiple deliverable revenue arrangement guidance on a prospective basis as of the beginning of fiscal year 2010 and has applied the amended guidance for revenue arrangements originating or materially modified after October 2, 2009. The adoption of the new accounting guidance did not have a material impact on the Company s previously reported financial position, results of operations or cash flows. The guidance does not change the units of accounting for the Company s revenue arrangements for its existing product and service offerings as of the adoption date. However, as the Company s future hardware and software product and service offerings may become more complex and interconnected, revenue recognition for multiple element arrangements under the new guidance could differ materially from the results under prior authoritative guidance. The Company is currently unable to determine the effect that the new guidance could have on its future revenue recognition as the Company s products and service offerings evolve.

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 also sold on a stand-alone basis. The X-ray Products business generally sells its x-ray tubes and flat panel detectors on a stand-alone basis. However, the X-ray Products business occasionally sells its flat panel detectors and x-ray tubes as a package that is optimized for digital x-ray imaging. While SIP products are generally sold on a stand-alone basis, SIP occasionally sells its Linatron® x-ray accelerators together with its imaging processing software and image detection products to original equipment manufacturer (OEM) customers which incorporate them into their inspection systems. Service contracts are often sold with Oncology Systems products, as well as with certain products in the X-ray Products and SIP businesses. As discussed below, certain of the Oncology Systems and SIP 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. Revenue related to service contracts usually starts after the expiration of the warranty period for non-software product or upon acceptance for software products.

For arrangements with multiple elements including hardware and software products that were entered into prior to fiscal year 2010, the Company allocated revenue to each element based on the prior authoritative guidance. For hardware products, the Company allocated revenue to each element based on its relative fair value and recognized the allocated revenue for each delivered element provided that it had value to the customer on a stand-alone basis. For software products (which includes software and deliverables for which a software deliverable is essential to its functionality), the Company allocated revenue to each element based on VSOE of its fair value. In the absence of VSOE of its fair value for a

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

delivered element, the Company first allocated revenue to the undelivered element based on the fair value of the undelivered elements and the residual revenue to the delivered elements, provided that the undelivered software element is not essential to the functionality of the delivered element. The Company limited the amount of revenue recognition for delivered elements to the amount that was not contingent on the future delivery of additional products or services.

For a multiple element arrangement that includes software and non-software deliverables entered into or materially modified after October 2, 2009, 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

For arrangements entered into or materially modified after October 2, 2009, non-software products include hardware products as well as software components that function together with the hardware components to deliver the product s essential functionality. Except as described below under Service Contracts and Other, 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 VSOE of selling price, if it exists; otherwise, TPE. If neither VSOE of selling price nor TPE exists for a deliverable, the Company uses the deliverable s 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 and SIP 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 either at the time of shipment or delivery, depending upon the shipping 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 non-software sales contract, 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 contract allows for cancellation only by mutual agreement, thus the customer does not have a unilateral right to return the delivered non-software product.

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

The Company establishes VSOE of selling price based on the price charged for a deliverable when sold separately and, for a deliverable not yet being sold separately, the price established by management having the relevant authority. As discussed above, many products are sold in stand-alone arrangements and accordingly have VSOE of selling price. Service contracts are sold separately through renewal of annual contracts. The Company establishes TPE generally by evaluating the Company s and competitors largely interchangeable competitor 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 service, 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 of selling prices or TPE, ESPs are used as the basis of their selling prices. The Company estimates selling prices following an established process that considers market conditions, including competitor product offerings and pricing strategies, 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 and SIP 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 until acceptance, 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 the acceptance. However, when the entire purchase price for the non-software product is conditioned upon acceptance, the Company defers all revenues until acceptance.

The Company does not have installation obligations for x-ray tubes, digital image detectors, spare parts and certain hardware products in Oncology Systems and the SIP business. 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 shipping terms of the contract, provided that all other revenue recognition criteria have been met.

Software Products

Except as described below under Service Contracts and Other, 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

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

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).

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 certain brachytherapy and SIP 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.

Service Contracts and Other

Revenues related to service contracts are recognized ratably over the period of the related contracts. Revenues related to services performed on a time-and-materials basis are recognized when they are earned and billable.

Revenues related to certain proton therapy commissioning service contracts and highly customized image detection systems are recognized under the percentage-of-completion method in accordance with contract accounting. Revenues recognized under the percentage-of-completion method are primarily based on contract costs incurred to date compared with total estimated contract costs. Estimated losses on contracts are charged to cost of sales in the period when the loss is identified.

Advance Payments from Customers

Except for government tenders, group purchases and orders with letters of credit, the Company typically requires its Oncology Systems, SIP and Varian Particle Therapy customers to provide a down payment prior to transfer of risk of loss of ordered products or an advance payment prior to performance under service contracts. These payments are recorded as Advance payments from customers in the Consolidated Balance Sheets.

Deferred Revenue

Deferred revenue includes (i) the billable amount applicable to shipment of software products but for which installation and/or final acceptance have not been completed and (ii) the billable amount applicable to installation and/or acceptance of non-software products for which have not been completed. Deferred costs associated with deferred revenues are included in Inventories in the Consolidated Balance Sheets.

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

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 and restricted stock units based on their fair values in accordance with ASC 718. Share-based compensation expense is based on the value of the portion of share-based payment awards that is ultimately expected to vest. Share-based compensation expense recognized in the Consolidated Statements of Earnings included compensation expense for share-based payment awards granted prior to, but not yet vested as of, September 30, 2005 based on the grant date fair value estimated in accordance with prior authoritative guidance and compensation expense for the share-based payment awards granted subsequent to September 30, 2005 based on the grant date fair value estimated in accordance with ASC 718. The Company attributes the value of share-based compensation to expense using the straight-line method.

The Company has valued its share-based payment awards 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. The Black-Scholes model requires the input of certain assumptions. VMS s stock options and the option component of the Employee Stock Purchase Plan shares have characteristics significantly different from those of traded options, and changes in the assumptions can materially affect the fair value estimates.

The Company uses the short-cut method to establish the beginning balance of the additional paid-in capital pool (APIC pool) related to the tax effects of share-based compensation, and to determine the subsequent impact on the APIC pool and the Consolidated Statements of Cash Flows of the tax effects of share-based compensation awards that were outstanding upon adoption of ASC 718. The Company considers only the direct tax impacts of share-based compensation awards when calculating the amount of tax windfalls or shortfalls.

For fiscal years 2010, 2009 and 2008, total share-based compensation expenses, before taxes, were $39.8 million, $42.6 million and $41.0 million, respectively. See Note 12, Employee Stock Plans for a detailed discussion.

Earnings per Share

Basic net earnings per share is computed by dividing net earnings 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 by the sum of the weighted average number of common shares outstanding and dilutive common shares under the treasury method.

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

The following table sets forth the computation of net basic and diluted earnings per share:

(In thousands, except per share amounts)	Fiscal Years 2010	2009	2008
Earnings from continuing operations	$ 367,481	$ 331,476	$ 295,256
Loss from discontinued operations, net of taxes	(7,059)	(12,454)	(15,772)
Net earnings	$ 360,422	$ 319,022	$ 279,484
Basic weighted average shares outstanding	121,816	124,034	124,800
Dilutive effect of potential common shares	2,209	961	2,804
Diluted weighted average shares outstanding	124,025	124,995	127,604
Net earnings (loss) per share basic:			
Continuing operations	$ 3.02	$ 2.67	$ 2.37
Discontinued operations	(0.06)	(0.10)	(0.13)
Net earnings per share	$ 2.96	$ 2.57	$ 2.24
Net earnings (loss) per share diluted:			
Continuing operations	$ 2.96	$ 2.65	$ 2.31
Discontinued operations	(0.05)	(0.10)	(0.12)
Net earnings per share	$ 2.91	$ 2.55	$ 2.19

The Company excludes shares underlying stock options from the computation of diluted weighted average shares outstanding if the per share value, either the exercise price of the options or the sum of (a) the exercise price of the options, (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 options would be antidilutive to earnings per share. Accordingly, stock options to purchase 2,321,408 shares, 8,245,887 shares and 4,744,873 shares at weighted average exercise prices of $52.90, $46.82 and $51.08, respectively, were excluded from the computation of diluted weighted average shares outstanding during fiscal years 2010, 2009 and 2008, respectively.

Shipping and Handling Costs

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

Research and Development

To date, research and development costs have been expensed as incurred. These costs primarily include employees compensation, consulting fees and material costs.

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 in accordance with ASC 985-20. 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.

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Comprehensive Earnings

Comprehensive earnings include all changes in equity (net assets) during a period from non-owner sources. Comprehensive earnings include currency translation adjustments, reclassification of foreign currency translation resulting from the sale of Research Instruments, 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), 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.

Recent Accounting Pronouncements

In December 2008, the FASB issued new guidance under ASC 715-20, which provides guidance on an employer s disclosure about plan assets of a defined benefit pension or other post-retirement plan and requires employers to disclose information about fair value measurements of plan assets. The new guidance under ASC 715-20 was effective for the Company as of the end of fiscal year 2010. The adoption of the new guidance concerns disclosure did not have an impact on the Company s consolidated financial position, results of operations or cash flows.

In June 2009, the FASB issued the consolidation guidance for variable-interest entities to replace the quantitative-based risks and rewards calculation for determining which enterprise, if any, has a controlling financial interest in a variable-interest entity with an approach focused on identifying which enterprise has the power to direct the activities of a variable-interest entity that most significantly impact the entity s economic performance. The new guidance will be effective for the Company in the first quarter of fiscal year 2011. The Company does not expect the adoption of the new guidance will have a material impact on its existing consolidated financial position, results of operations and cash flows.

In March 2010, the FASB issued the guidance related to the Milestone Method of Revenue Recognition (ASU 2010-17), which recognizes the milestone method as an acceptable revenue recognition method for substantive milestones in research or development transaction. ASU 2010-17 is effective for the Company in the first quarter of fiscal year 2011, with early adoption permitted. The Company does not expect the adoption of the new guidance will have a material impact on its consolidated financial position, results of operations and cash flows.

In July 2010, the FASB issued ASU 2010-20 to provide guidance to enhance disclosures related to the credit quality of a company s financing receivables portfolio and the associated allowance for credit losses. Pursuant to this guidance, a company is required to provide a greater level of disaggregated information about its allowance for credit loss with the objective of facilitating users evaluation of the nature of credit risk inherent in the company s portfolio of financing receivables, how that risk is analyzed and assessed in arriving at the allowance for credit losses, and the changes and reasons for those changes in the allowance for credit losses. The revised disclosures as of the end of the reporting period will be effective for the Company beginning in the first quarter of fiscal year 2011, and the revised disclosures related to activities during the reporting period will be effective for the Company beginning

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VARIAN MEDICAL SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

in the second quarter of fiscal year 2011. The Company is currently evaluating the impact of this accounting update on its financial statement disclosures.

2. BALANCE SHEET COMPONENTS

(In millions)	October 1, 2010	October 2, 2009
Inventories:		
Raw materials and parts	$ 208.8	$ 183.1
Work-in-progress	54.3	54.7
Finished goods	100.8	84.1
Total inventories	$ 363.9	$ 321.9
Property, plant and equipment:		
Land and land improvements	$ 42.5	$ 42.5
Buildings and leasedhold improvements	189.3	185.8
Machinery and equipment	303.3	280.0
Construction in progress	25.7	18.1
Assets subject to lease	2.0	0.8
	562.8	527.2
Accumulated depreciation and amortization	(294.9)	(263.1)
Property, plant and equipment, net	$ 267.9	$ 264.1
Accrued expenses:		
Accrued compensation and benefits	$ 129.8	$ 125.0
Income taxes payable	42.1	48.0
Current deferred tax liabilities	3.9	1.9
Other	112.1	129.5
Total accrued expenses	$	