Varian Medical Systems (VMS) is the world's leading manufacturer of integrated radiotherapy systems for treating cancer and a leading supplier of X-ray tubes for imaging in medical, scientific, and industrial applications. The company employs approximately 2,300 people at manufacturing sites in North America and Europe and in 40 sales and support offices worldwide.

### Fiscal Years (Dollars in millions except per share amounts)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Sales</th>
<th>Net Earnings from Continuing Operations— as Reported</th>
<th>Net Earnings from Continuing Operations— Pro Forma*</th>
<th>Shares Outstanding at Year End (in thousands)</th>
<th>Shares Outstanding at Year End (in thousands)</th>
<th>Shares Outstanding at Year End (in thousands)</th>
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</thead>
<tbody>
<tr>
<td>2000</td>
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<tr>
<td>1998</td>
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<td>$26.1</td>
<td>$36.0</td>
<td>$29,743</td>
<td>$29,743</td>
<td>$29,743</td>
</tr>
</tbody>
</table>

*Pro forma net earnings assume a 35 percent tax rate and exclude incremental expenses and gains on sales of assets related to the spin-off of the Company's instruments and semiconductor equipment businesses on April 2, 1999.

### Risk Factors Relating to Forward-Looking Information

Except for historical information, this summary annual report contains “forward-looking” statements within the meaning of the Private Securities Litigation Reform Act of 1995 which provides a “safe harbor” for these types of statements. For this purpose, statements concerning industry outlook, including market acceptance of or transition to new products or technology such as IMRT, brachytherapy, software, treatment techniques, and advanced X-ray products; growth drivers; Varian Medical Systems, Inc.’s (the “Company” or “VMS”) orders, sales, backlog or earnings growth; future financial results and any statements using the terms “anticipates,” “believes,” “expects,” “appears,” “should,” “will,” “point to” or similar statements are forward-looking statements that involve risks and uncertainties that could cause the Company’s actual results to differ materially from those projected or management’s current expectations. Such risks and uncertainties include, without limitation, market acceptance, demand for and possible obsolescence of VMS’s products; the Company’s ability to successfully develop and commercialize new products; the impact on VMS’s sales and margins of competitive products and pricing; the effect of general economic conditions and foreign currency exchange rates; the Company’s ability to increase operating margins on higher sales while controlling costs; the Company’s ability to maintain manufacturing capacity to meet demand; the potential impact of environmental claims and clean-up expenses on VMS’s costs; the Company’s ability to protect its intellectual property and the related competitive advantages of VMS’s products; the Company’s reliance on sole source or a limited number of suppliers; the impact of managed care initiatives or other healthcare reforms in the U.S. on capital expenditures and/or limitations on third party reimbursements and the resulting pressure on medical equipment pricing and user demand for VMS’s products; the Company’s ability to meet U.S. FDA and other domestic or foreign regulatory requirements or product clearances which might limit the products VMS can sell or subject it to fines or other regulatory actions; the use of distributors for a portion of the Company’s sales, the loss of which could reduce sales and harm the Company’s financial results, as could continued consolidation in the X-ray tube market; the possibility that material product liability claims could harm future sales, or require payment of uninsured claims; the availability and adequacy of VMS’s insurance to cover future material liabilities, including any material product liability or product recall of General Electric manufactured products for which the Company provides customer service and has assumed such liabilities; the ability of the Company to attract and retain key employees in a highly competitive employment market; the effect of fluctuations in VMS’s operating results on the price of its common stock; the possibility that certain provisions of VMS’s Certificate of Incorporation and its stockholder rights plan might discourage a takeover and therefore limit the price of the Company’s common stock; the Company’s ability to meet time requirements for and implement conversion to the Euro currency in its business dealings and operations in certain European countries; the effect of price transparency in countries of the European Community following implementation of Euro currency regulations; the effect on profit margins of product recycling and related regulatory requirements in Europe and other countries; the Company’s potential responsibility for additional tax obligations and other liabilities arising out of the spin-off of segments of its former businesses; the effect on VMS’s revenue recognition of changes in accounting standards; and other risks detailed from time to time in the Company’s filings with the Securities and Exchange Commission. The Company assumes and undertakes no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.
BUSINESS OVERVIEW

Varian Oncology Systems is the world's leading supplier of radiotherapy systems, offering a comprehensive line of products for radiation therapy, radiation biology research, and brachytherapy. The company is committed to providing the best treatment options for patients, while advancing the science of radiation therapy.


The global market for radiotherapy products should continue to grow, partly with timing of new facilities and partly with the growing number of cancer patients worldwide. There should also be an increasing emphasis on prevention and early detection programs for cancer.

BUSINESS FACILITIES

Varian Oncology Systems

- **Baden**, Switzerland
- **Buc**, France
- **Chicago**, Illinois
- **Crawley**, England
- **Espoo**, Finland
- **Milpitas**, California
- **Palo Alto**, California (headquarters)
- **Tokyo**, Japan
- **Zug**, Switzerland

Varian X-Ray Products

- **Chicago**, Illinois
- **Coventry**, England
- **Espoo**, Finland
- **Hippolyte**, California
- **Mountain View**, California (headquarters)
- **Salt Lake City**, Utah
- **Charlottesville**, Virginia
- **Charleston**, South Carolina
- **Mountain View**, California

Varian Technology Center

- **Cransshaw's virginia\n  Crowne Plaza\n  Mountain View**, California (headquarters)
Our company is on the forefront of the most exciting revolution in radiotherapy in more than 30 years. Technical advances have created an opportunity to substantially improve cancer outcomes. Physicians are zeroing in on tumors with new diagnostic imaging tools and techniques, including SmartBeam™ IMRT, to treat patients more effectively than ever. These developments come at a critical time as aging baby boomers add to a growing global cancer epidemic, and patients are using newfound power on the Internet to research and demand the best care possible. These driving forces are transforming radiation oncology and the pace of change is quickening.

Richard M. Levy,
President and CEO
To our shareholders

embarking on new applications for radiotherapy, including the treatment of cardiovascular disease through an alliance with Cordis, a Johnson and Johnson Company. Cordis will market one of only two brachytherapy systems approved by the US Food and Drug Administration for treating lesions in coronary arteries following balloon angioplasty procedures. Varian will supply and service radiation components for the system.

Partnerships also are playing a role in the growth of our X-Ray Products business. Varian engineers constantly work with diagnostic imaging equipment manufacturers to improve products and processes. In the last year, our engineering team has tripled both tube life and manufacturing volume on this new product.

Formula for Success

The company has the resources in its Ginzton Technology Center to fund research in new breakthrough projects with high potential. The Ginzton team is continuing to commercialize our brachytherapy business—another promising growth story for the company.

Our people are a big part of the Varian Medical Systems story. We owe our success to committed and energetic employees who make our partnerships work. They share a desire for innovation to improve patients' lives.

To our shareholders

Richard M. Levy, President and CEO

December 8, 2000

Fiscal 2000 was an outstanding year for Varian Medical Systems by almost every measure. We reported:

- A 28% increase in annual earnings per diluted share to $1.64 over pro forma earnings per diluted share of $1.28 for fiscal 1999
- A 17% or $100 million increase in annual sales from fiscal 1999 levels to $690 million
- A 19% increase in annual net orders to $762 million
- A 38% increase in our year-end backlog to over $1 billion

Our company is on the forefront of the most exciting revolution in radiotherapy that I have witnessed in my 30 years of working in this industry. Higher technical standards in diagnostic imaging and radiotherapy systems now enable physicians to see and think about disease differently. Clinicians around the globe are integrating and using new techniques, including multi-field cone-beam imaging (IMRT) intensity-modulated radiation therapy, respiratory gating, and conformal therapy to substantially improve cancer outcomes. They are providing patients with more options and enabling lower radiation doses on tumors that previously had been deemed inoperable. They are refining the improved accuracy to deliver higher doses more safely, which means that we now have more patients surviving with their quality of life improved and maintained.

Our company is engaged in a patient-focused educational campaign. It concentrates on building awareness of IMRT with media relations, advertising, and a newly designed website. IMRT is one of the most advanced radiotherapy technologies, which makes it a great way to advance radiotherapy technology with partners, including hospitals and universities with research capabilities.

Medical Centers in all regions of the world are modernizing and expanding their radiotherapy systems to take advantage of the new technology and to address underserved populations. Advocacy groups and the research community have begun to change the way we search for and deal with these challenges. Translating that information requires an acceleration of research and the adequate supply of personnel.

Partners for Life

In these pages we describe people who are partnering with Varian and using our most advanced technology to treat prostate, breast, head and neck, brain, lung, and other forms of cancer. You will also hear about advancements in X-ray imaging technology, including our flat panel detector, for faster, high-resolution CT scanning.

The Heart of IMRT

After 10 years of intense development and collaboration with the clinical community, Varian has made significant improvements in IMRT. We now have hardware and software that provides the flexibility to dramatically improve patient outcomes with simultaneous increases in tumor control and reductions in complications.

Our challenge is to increase this momentum further through education to bring the technical improvements to the clinical mainstream as a new treatment option with demonstrated promise. We are making great progress in this effort.

New IMRT treatment planning systems that should be in clinical use in 1999. The systems are the Silhouette Edition Clinac, which enables customers to fit the most advanced radiotherapy systems into small treatment rooms, and the Silhouette Edition 2000, which is a more advanced system with optional photographic murals, a stereo sound system, and a variety of patient treatment centers.

Our company is committed to advancing radiotherapy technology with partners, including hospitals and universities with research capabilities, and to advancing radiotherapy technology with partners, including hospitals and universities with research capabilities.

New IMRT technology is already in clinical use at a growing number of hospitals, including Memorial Sloan-Kettering Cancer Center, Sloan-Kettering Medical Center, and Roswell Park Cancer Institute. Varian and its partners are committed to improving the lives of our patients.

Our people are a big part of the Varian Medical Systems story. We owe our success to committed and energetic employees who make our partnerships work. They share a desire for innovation to improve patients' lives.

To our shareholders

Richard M. Levy, President and CEO

December 8, 2000
ZION, IL

VariSource, Varian’s high dose rate brachytherapy system, delivers a controlled dose of radiation directly to the cancer site with computer precision. William Reinka’s therapy included brachytherapy and IMRT.

Partners for Life

PROSTATE CANCER

Half of all patients diagnosed with cancer today in North America receive radiotherapy at some stage. During the next 20 years, global cancer incidence will rise, and we will add more than 50 million new cancer patients annually. And cancer will, unfortunately, become the leading cause of death in many populations.

There is a growing need for more radiotherapy instrumentation—particularly linear accelerators, the superior technology as recognized by the World Health Organization. Varian is dedicated itself to bringing this technology to academic centers, community hospitals, and underserved regions everywhere.


“We wanted the best radiation therapy center in our region, and we were looking for such a system to install in a community hospital.”

Dr. Bradley Kramer, Midwestern Regional Medical Center, Zion, Illinois

William Reinka discovered he had prostate cancer at age 78. His local urologist suggested that he wait and see how the disease would progress, but he didn’t want to sit around and wait for the cancer to grow. Mr. Reinka, who is retired, consulted the Internet, helped by his daughter, who has a PhD in public health. He found that improved diagnostic techniques over the past 25 years had shown the disease to be far more common than previously thought. He also learned that prostate cancer patients have a wide range of treatment options, often used in combination. Surgical prostate removal, radiation therapy, hormonal therapy, and even watchful waiting.

“I read about IMRT, a new method with minimal side-effects, and I discovered that Varian had an excellent instrument,” says Mr. Reinka. He also discovered Dr. Bradley Kramer, Medical Director of Radiation Oncology at the Midwestern Regional Medical Center in nearby Zion, Illinois. Midwestern is one of the few community hospitals to provide brachytherapy and IMRT. Until recently, this advanced therapy had only been found in university or large, urban hospitals.

Dr. Kramer agreed with Mr. Reinka’s treatment choice. In traditional IMRT, the radiation is delivered in specific beams, and the surrounding tissues are left unirradiated. The result is that radiation is delivered in large, uncontrolled doses. But with IMRT, the radiation is delivered in small, controlled doses. This means that the radiation is more carefully targeted, and the risk of side-effects is greatly reduced.

IMRT allows the physician to focus the radiation on the cancer and minimize the radiation dose to the surrounding tissues. This is important because the radiation can damage healthy cells, leading to side-effects such as fatigue, hair loss, and decreased quality of life.

“IIMRT may allow physicians to treat a patient with lower doses of radiation using a combination of surgical prostate removal, external beam radiation, and brachytherapy,” said Dr. Kramer. “This means that patients can receive their treatment with fewer side-effects and less damage to the surrounding tissue.”

As for Mr. Reinka, 30 days after IMRT treatment his PSA result had dropped to near zero, down from a high of 7.1 six months earlier. And just recently, he turned 80.
Varian’s CadPlan PLUS/Helios software is an inverse treatment-planning tool that enables clinics to develop optimized plans for delivering IMRT to patients like Nancy Worthen, to treat breast tumors while protecting surrounding healthy tissues. Patient anatomies and treatment areas are shown using 3D images.

On April 26, 1999, Nancy Worthen, a U.S. woman diagnosed with invasive breast cancer, became a statistic. More than 180,000 American women are diagnosed with breast cancer each year, and approximately 44,000 of these women die from breast cancer each year. Increased age and environmental factors are among the many risk factors for breast cancer. Genetic risks also play a role.

After being diagnosed, Mrs. Worthen learned about alternatives in therapy and started writing a newsletter for her friends who were closely following her treatment. “KEEPING ABREAST,” is available on the Varian Medical Systems website, www.varian.com (click on Patient Education).

IMRT uses computer-generated images to plan and deliver more focused radiation to tumors than is currently possible with conventional radiation therapy. Physicians can draw and paint virtual radiation doses that mirror the shape of the tumor while significantly reducing the detrimental side effects of radiation on surrounding healthy tissues. IMRT also allows practitioners to apply various uniform radiation doses to treated tumor, a challenge because of the varying thickness and density of the breast tissue.

“IMRT permits doctors to conserve the breast and provide a better cosmetic outcome,” Dr. Landry says. “With about 15 to 20 percent of all breast cancer patients undergoing a course of radiation therapy during the course of their disease, this technology offers a safe method to treat the tumor with higher radiation doses.”

IMRT is now being used at many community hospitals as well as university medical centers, both in the United States and around the world, in treating cancers other than breast cancer. Dr. Ting adds, “I believe IMRT will move into the mainstream of medicine quickly.”

Dr. Joseph Ting, Ph.D., medical physicist on Worthen’s healthcare team, agrees with Dr. Landry. He has seen the evolution of IMRT into new treatment protocols for breast, prostate, pancreatic, and head and neck cancers over the past few years. “IMRT treatment is associated with significantly fewer radiation side effects than with conventional radiotherapy,” says Dr. Ting. “It allows us to move into the mainstream of medicine quickly and will be adopted quickly not only by university medical centers but also by community hospitals as a standard of care for more patients.”
TREATING NASOPHARYNGEAL CANCER

Differences among healthcare systems have always existed in Asia, ranging from ultra-sophisticated Hong Kong to countries that are just beginning to purchase advanced equipment. Several Asian countries have multiple modern radiotherapy sites and others are beginning to bring this new technology to underserved areas.

For example, in Cebu, Philippines, the Tan Kim Ching Cancer Center will soon open a center with advanced equipment. And in Nepal, the B.P. Koirala Memorial Cancer Hospital in Bharatpur, Chitwan will soon inaugurate a new system to help counter a steady increase in cancer rates.

Chan King Ho’s doctors used Helios Inverse Planning software to minimize the dose to her parotid glands, brainstem, upper spinal cord, and optic nerve. Helios works in conjunction with Varian’s MLC-120 collimator to achieve unrivaled precision in cancer treatment.

Cancer demographics have identified the Pearl River in Southern China near Canton as a central occurrence area of nasopharyngeal cancer (NPC). There, the median aged patients with this difficult-to-treat cancer is six years younger than patients throughout the rest of the world in Hong Kong. The nasopharyngeal cancer incidence is approximately 24 per 100,000, ranking NPC fifth after lung, liver, and breast cancers.

Physicians in Hong Kong treat about 500 new patients with nasopharyngeal cancer each year. Many patients with NPC experience side effects that greatly diminish quality of life. In Hong Kong, the nasopharyngeal cancer incidence is approximately 24 per 100,000, ranking NPC fifth after lung, liver, and breast cancers.

For instance, Mrs. Chan, a 43-year-old wife and mother of four children, feels very fortunate to be one of the first of Dr. Choi’s patients to receive this new form of radiation therapy. A fractionated radiation therapy treatment course of IMRT designed at the University of Wisconsin-Madison to minimize dose to surrounding healthy tissue.

"Physicians in Hong Kong treat about 500 new patients with nasopharyngeal cancer each year," says Dr. Peter Choi of the Prince of Wales Hospital in Hong Kong. "Our standard treatment has been radiotherapy, but we wanted to develop a protocol that would not cause damage to the neck, upper spine, optic nerve, or parotid gland. This is particularly important with the parotid gland, where high doses of conventional radiotherapy could result in permanent loss of saliva–an unfortunate side effect that greatly diminishes quality of life."

Recently, Dr. Choi started treating patients at Prince of Wales Hospital with a newly installed Helios IMRT system that concentrates higher doses of radiation to the tumor while sparing surrounding healthy tissue.

According to Dr. K.Y. Cheung, Senior Physicist and Head of Medical Physics at the Department of Clinical Oncology at Prince of Wales Hospital, Varian’s IMRT system is safe, practical and user-friendly. "Managing IMRT treatments using the Helios Inverse Planning module is relatively easy and fast compared to the traditional conformal radiotherapy planning," says Dr. Cheung. "We can achieve much better dose distributions in IMRT treatments, and we have found the initial clinical results in the first few NPC patients treated with IMRT to be very encouraging."

One of these initial patients is Mrs. Chan. After four months of IMRT, she has regained hope and expectations for NPC. She is the first NPC patient to receive IMRT in Hong Kong. "This is particularly important with NPC because it wraps around vital organs in the head and neck area. Mrs. Chan feels very fortunate to be one of the first of Dr. Choi’s patients to receive this new form of radiation therapy. A fractionated radiation therapy treatment course of IMRT designed at the University of Wisconsin-Madison to minimize dose to surrounding healthy tissue.

"We have found the initial clinical results in the first few NPC patients treated with the technique to be very encouraging."
Varian's RPM™ Respiratory Gating System adds a new level of precision to radiation therapies. It controls dose delivery to compensate for tumor motion caused by breathing. This has potential in the treatment of tumors in lungs and other areas affected by respiratory motion.

"Using IMRT, we aim to give higher doses of radiation more safely, which should lead to increased survival and reduced side effects."

Dr. Christopher Nutting, Clinical Oncologist, St. Bartholomew's Hospital, London, England

"You have to trust your cancer team," says Joan Harris, who fought and won her battle against cancer - first in her breast and then later in her head, requiring radiation treatment of brain and lung tumors. "It was very difficult to have established an excellent personal relationship with everyone at the cancer treatment center at St. Bartholomew's Hospital. When you are ill with cancer, you put your hope in them." 

Head and neck cancers represented 20% of all cancers diagnosed today. Tumors can be located close to the spinal cord, optic nerves, and the brain and may be very difficult to treat. Radiation delivered outside the target area risks damaging these critical structures or other surrounding tissues.

One of the first cancer treatment centers in England to incorporate Varian's SmartBeam IMRT system into their protocols is St. Bartholomew's Hospital. According to Dr. Christopher Nutting, Clinical Oncologist there, the most effective treatments available to head and neck cancer patients are surgery and radiotherapy, sometimes combined with chemotherapy.

"IMRT can afford a significant reduction in radiation dose to the parotid gland and the spinal cord, or allow a higher, more effective radiation dose to be delivered to the tumor," Dr. Nutting says. "This higher dose can lead to more safety, since it offers both increased survival and reduced side effects for groups of cancer patients. The Varian IMRT system integrates treatment planning with the Helios radiotherapy inverse planning program and dynamic MLC delivery."

With the placement of IMRT systems at St. Bartholomew's and other hospitals, the United Kingdom is among the nations leading Europe in improving radiation cancer therapy. Following the World Health Organization's guidelines for radiotherapy, the U.K. Department of the Treasury has announced the purchase of 64 new accelerators for cancer care. In addition, the new Opportunity Fund, for projects not directly funded by the government, will sponsor another 56 new linear accelerators in the U.K.

These linear accelerators will upgrade cancer care in more than 60 treatment centers in England. Many other European centers including Amsterdam, Holland; Bern, Switzerland; and Leuven, Belgium already modernize their systems for state-of-the-art cancer care.
Partners for Life

SANTIAGO

"We want to be on the frontier of treating patients with cancer."

An earnest man, Dr. Pelayo Besa makes this statement as much as a desire as a mandate. As Chief of Radiation Oncology at Pontificia Universidad Católica de Chile, he and his colleagues are partnering with Varian Medical Systems to form a Center of Excellence for radiotherapy in Santiago, "a haven to offer advanced and high-quality medical care," he explains.

Chilean cancer demographics closely resemble those of the United States, except for a higher percentage of gastric cancers. Until recently, cobalt irradiation instruments served as the primary source for radiotherapy in Chile's public hospitals. Now that these institutions have invested in World Health Organization-approved linear accelerators, they are on the cutting edge of conformal radiotherapy, having averaged more than 80 patients per day with this type of therapy.

Chilean doctors want the best treatment for their patients. IMRT is part of the best treatment for cancer patients."
Varian’s PaxScan amorphous silicon image receptors could eliminate the need for film and its associated radiation exposure, allowing physicians to view images with less exposure to radiation, reducing healthcare costs, and assuring patient safety.

Partners for Life

NEONATAL CARE

In the 1990s, researchers at Varian’s Ginzton Technology Center in Palo Alto, California developed a digital replacement for X-ray film and image processing. Today, more than 100 of these systems are being used in diverse application areas from neonatal intensive care units to steel mills.

CHARLESTON, SC

Very premature babies desperately need oxygen, nutrition, and other life support. In most hospitals, X-ray films are taken to verify placement. But taking and developing films is a time-consuming process, especially when the radiology department is located several miles away from the neonatal intensive care unit (NICU). In late 1999, Varian’s Medical Products business introduced a PaxScan 2020 amorphous silicon (a-Si) flat panel image receptor in the Pediatric Radiology Department at the Medical University of South Carolina (MUSC). The panel system is being tested for patient safety in radiographic evaluation of preterm infants.

“We are treating infants who are critically ill in the neonatal ICU,” says Dr. Jeanne Hill, Director of Pediatric Radiology at MUSC and principal investigator in the clinical study. “The parents are overwhelmed and terrified. They don’t know if their baby will survive. Doing anything we can to do to speed up accurate diagnosis and treatment is极具重要 in these scary times. The very first images obtained with the PaxScan compare favorably to conventional X-ray film and the radiation load is low enough to give a significant amount of time during the most critical hours of a newborn’s life.

“Nurses sometimes must sit still for as long as an hour, holding in place a breathing tube or other condition requiring immediate treatment, while they wait for X-ray results to come back. The images are displayed instantly on a monitor. In this way, doctors can adjust support lines within minutes.

Dr. Hill says the flat panel system needs only one-third the radiation required by X-ray film. “These preemies have dozens of X-rays in the first year of their lives. We must remain concerned about cumulative radiation dose and the flat panel technology relieves this concern.”

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120 LEAF MULTILEAF COLLIMATOR

Varian’s 120 MultiLeaf Collimator, the only one of its kind in clinical use, allows the highest resolution treatment ever. In addition to treatments with more than 120 leaves, Varian offers the first system to deliver discrete doses to areas as small as 2 mm x 5 mm, and conform treatments to tumors of any size or shape.

RESPIRATORY GATING

The Respiratory Gating System adds a new level of precision to radiation therapy. The first single, multi-leaf system to produce respiratory gating, the Varian system “gates” or turns on the radiation beam only when a targeted tumor is within a prescribed area.

a-Si FLAT PANEL IMAGING

The amorphous silicon flat panel image detection unit acquires both fluoroscopic and radiographic images on the same receptor and displays them digitally, eliminating the need for X-ray film. This technology is at the center of Varian’s portal imaging product, which enables clinicians to instantly evaluate IMRT treatments and ensure that radiation beams are targeted correctly. It is also being used in other medical applications and for inspection in industrial settings.

INTEGRAL HOUSING TUBE

Varian has introduced patented innovations into high performance X-ray tube technology, including the INTEGRAL HOUSING TUBE. The tube’s less costly, safer, more durable, easier to use, lighter, smaller, quieter, and more environmentally friendly nature make it the most reliable and versatile in the world. Today, more than 3,000 Varian systems are in service around the world, treating an estimated 1,000,000 cancer patients each year.

SYSTEM INTEGRATION

Generation 6 is the world’s first and only fully-integrated system from a single supplier for managing treatment delivery and simulation, information management, verification for quality assurance, and department administration.

FINANCIAL REVIEW

This year’s Annual Report is designed to provide useful information on Varian Medical Systems, Inc. in a format that is both concise and cost-effective. It is not intended as a substitute for the company’s quarterly and annual filings with the Securities and Exchange Commission. The company’s complete audited financial statements are included in the company’s fiscal year 2000 Annual Report on Form 10-K.
## Consolidated Statements of Earnings

**On April 2, 1999, the Company spun off its instruments and semiconductor equipment businesses to its common shareholders. The operations of these businesses are reflected as discontinued operations for the fiscal year 1999 and fiscal 1998 periods presented. In association with the spin-off, the Company also recorded significant reorganization charges in fiscal year 1999.**

<table>
<thead>
<tr>
<th>Fiscal Years</th>
<th>2000</th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$689,700</td>
<td>$590,440</td>
<td>$541,461</td>
</tr>
<tr>
<td>Operating costs and expenses</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cost of sales</td>
<td>432,603</td>
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</tr>
<tr>
<td>Research and development</td>
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<td>39,895</td>
<td>39,255</td>
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<tr>
<td>Selling, general and administrative</td>
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<td>116,131</td>
<td>117,528</td>
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<tr>
<td>Reorganization</td>
<td>227</td>
<td>29,668</td>
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<tr>
<td>Acquisition-related expenses</td>
<td>1,977</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total operating costs and expenses</strong></td>
<td>$601,977</td>
<td>$566,129</td>
<td>$503,081</td>
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<tr>
<td>Operating earnings</td>
<td>87,703</td>
<td>24,311</td>
<td>38,380</td>
</tr>
<tr>
<td>Interest expense</td>
<td>(5,161)</td>
<td>(9,980)</td>
<td>(8,835)</td>
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<tr>
<td><strong>Interest income</strong></td>
<td>2,333</td>
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<tr>
<td><strong>Earnings from continuing operations before taxes</strong></td>
<td>$84,875</td>
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<td>$35,963</td>
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<tr>
<td><strong>Taxes on earnings</strong></td>
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<td>10,021</td>
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<tr>
<td><strong>Earnings from continuing operations</strong></td>
<td>$53,049</td>
<td>$8,218</td>
<td>$26,144</td>
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<tr>
<td><strong>Earnings (loss) from discontinued operations—net of taxes</strong></td>
<td>—</td>
<td>$(1.07)</td>
<td>1.60</td>
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<tr>
<td><strong>Net earnings (loss) per share—basic</strong></td>
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<tr>
<td><strong>Net earnings (loss) per share—diluted</strong></td>
<td>$1.64</td>
<td>$(0.79)</td>
<td>2.43</td>
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## Consolidated Balance Sheets

### Final Year End

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<th>September 29, 2000</th>
<th>October 1, 1999</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$83,321</td>
<td>$25,126</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>226,442</td>
<td>233,785</td>
</tr>
<tr>
<td>Inventories</td>
<td>92,482</td>
<td>78,324</td>
</tr>
<tr>
<td>Other current assets</td>
<td>48,343</td>
<td>45,011</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>$450,588</td>
<td>$382,246</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>206,614</td>
<td>200,386</td>
</tr>
<tr>
<td>Accumulated depreciation and amortization</td>
<td>(126,515)</td>
<td>(120,138)</td>
</tr>
<tr>
<td><strong>Net property, plant and equipment</strong></td>
<td>$80,099</td>
<td>$80,248</td>
</tr>
<tr>
<td>Other assets</td>
<td>71,863</td>
<td>76,689</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$602,550</td>
<td>$539,183</td>
</tr>
</tbody>
</table>

| **Liabilities and stockholders’ equity** | | |
| Current liabilities | | |
| Notes payable | $616 | $35,587 |
| Accounts payable—trade | 41,351 | 40,141 |
| Accrued expenses | 128,391 | 121,165 |
| Product warranty | 19,975 | 18,152 |
| Advance payments from customers | 59,563 | 54,757 |
| **Total current liabilities** | $249,896 | $269,802 |
| Long-term accrued expenses | 23,795 | 25,890 |
| Long-term debt | 58,500 | 58,500 |
| **Total liabilities** | $332,191 | $354,192 |
| Stockholders’ equity | | |
| Preferred stock | | |
| Authorized 1,000,000 shares, par value $1, issued and outstanding none | | |
| Common stock | | |
| Authorized 99,000,000 shares, par value $1, issued and outstanding 31,769,000 shares at September 29, 2000, and 30,563,000 shares at October 1, 1999 | 31,769 | 30,563 |
| Capital in excess of par value | 50,869 | 20,185 |
| Retained earnings | 187,721 | 134,243 |
| **Total stockholders’ equity** | $270,395 | $184,991 |
| **Total liabilities and stockholders’ equity** | $602,550 | $539,183 |

---

**Net earnings (loss) per share**

- **Basic**
  - Continuing operations: $1.71
  - Discontinued operations: $(0.80)
  - **Total**: $0.91
- **Diluted**
  - Continuing operations: $1.64
  - Discontinued operations: $(0.79)
  - **Total**: $0.85
### CONSOLIDATED STATEMENTS OF CASH FLOWS

<table>
<thead>
<tr>
<th>Fiscal Years</th>
<th>2000</th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net cash provided/(used) by operating activities</td>
<td>$83,839</td>
<td>$(33,557)</td>
<td>$127,753</td>
</tr>
<tr>
<td><strong>Investing activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from sale of property, plant and equipment</td>
<td>1,786</td>
<td>54,260</td>
<td>2,321</td>
</tr>
<tr>
<td>Purchase of property, plant and equipment</td>
<td>(19,234)</td>
<td>(39,402)</td>
<td>(46,954)</td>
</tr>
<tr>
<td>Purchase of businesses, net of cash acquired</td>
<td>—</td>
<td>(5,849)</td>
<td>(105,470)</td>
</tr>
<tr>
<td>Other, net</td>
<td>(4,124)</td>
<td>3,851</td>
<td>7,035</td>
</tr>
<tr>
<td><strong>Net cash (used)/provided by investing activities</strong></td>
<td>$(21,572)</td>
<td>12,860</td>
<td>$(143,068)</td>
</tr>
<tr>
<td><strong>Financing activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net (repayments)/borrowings on short-term obligations</td>
<td>$(34,971)</td>
<td>11,253</td>
<td>27,624</td>
</tr>
<tr>
<td>Proceeds from long-term borrowings</td>
<td>—</td>
<td>—</td>
<td>38,000</td>
</tr>
<tr>
<td>Principal payments on long-term debt</td>
<td>—</td>
<td>(12,138)</td>
<td>(96)</td>
</tr>
<tr>
<td>Proceeds from common stock issued to employees</td>
<td>23,730</td>
<td>15,667</td>
<td>19,732</td>
</tr>
<tr>
<td>Purchase of common stock</td>
<td>—</td>
<td>—</td>
<td>(54,276)</td>
</tr>
<tr>
<td>Dividends paid</td>
<td>—</td>
<td>(2,991)</td>
<td>(14,348)</td>
</tr>
<tr>
<td>Cash distributed in spin-off of businesses</td>
<td>—</td>
<td>(119,273)</td>
<td>—</td>
</tr>
<tr>
<td>Other, net</td>
<td>—</td>
<td>2,792</td>
<td>2,692</td>
</tr>
<tr>
<td><strong>Net cash (used)/provided by financing activities</strong></td>
<td>$(11,241)</td>
<td>$(104,690)</td>
<td>19,328</td>
</tr>
<tr>
<td><strong>Effects of exchange rate changes on cash</strong></td>
<td>7,169</td>
<td>846</td>
<td>3,356</td>
</tr>
<tr>
<td><strong>Net increase (decrease) in cash and cash equivalents</strong></td>
<td>58,195</td>
<td>$(124,541)</td>
<td>7,369</td>
</tr>
<tr>
<td><strong>Cash and cash equivalents at beginning of fiscal year</strong></td>
<td>25,126</td>
<td>149,667</td>
<td>142,298</td>
</tr>
<tr>
<td><strong>Cash and cash equivalents at end of fiscal year</strong></td>
<td>$83,321</td>
<td>$25,126</td>
<td>$149,667</td>
</tr>
<tr>
<td><strong>Detail of net cash provided/(used) by operating activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net earnings/(loss)</td>
<td>$53,049</td>
<td>$(24,238)</td>
<td>$73,840</td>
</tr>
<tr>
<td>Adjustments to reconcile net earnings/(loss) to net cash provided/(used) by operating activities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>17,794</td>
<td>30,879</td>
<td>42,663</td>
</tr>
<tr>
<td>Allowances for doubtful accounts</td>
<td>1,142</td>
<td>2,704</td>
<td>3,020</td>
</tr>
<tr>
<td>Loss/(gain) from sale of assets</td>
<td>73</td>
<td>(30,565)</td>
<td>62</td>
</tr>
<tr>
<td>Amortization of intangibles</td>
<td>4,162</td>
<td>6,519</td>
<td>4,993</td>
</tr>
<tr>
<td>Deferred taxes</td>
<td>(1,062)</td>
<td>(20,850)</td>
<td>(5,166)</td>
</tr>
<tr>
<td>Non-cash stock-based compensation</td>
<td>190</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Changes in assets and liabilities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>(8,802)</td>
<td>(32,600)</td>
<td>30,770</td>
</tr>
<tr>
<td>Inventories</td>
<td>(14,158)</td>
<td>3,295</td>
<td>(18,098)</td>
</tr>
<tr>
<td>Other current assets</td>
<td>1,811</td>
<td>(14,098)</td>
<td>(2,458)</td>
</tr>
<tr>
<td>Accounts payable—trade</td>
<td>3,121</td>
<td>6,558</td>
<td>(16,728)</td>
</tr>
<tr>
<td>Accrued expenses</td>
<td>12,192</td>
<td>23,097</td>
<td>(3,671)</td>
</tr>
<tr>
<td>Product warranty</td>
<td>2,000</td>
<td>(2,961)</td>
<td>7,061</td>
</tr>
<tr>
<td>Advance payments from customers</td>
<td>5,938</td>
<td>13,319</td>
<td>186</td>
</tr>
<tr>
<td>Long-term accrued expenses</td>
<td>(2,095)</td>
<td>(3,056)</td>
<td>9,019</td>
</tr>
<tr>
<td><strong>Net cash provided/(used) by operating activities</strong></td>
<td>$83,839</td>
<td>$(33,557)</td>
<td>$127,753</td>
</tr>
</tbody>
</table>
**Officers & Directors**

**Officers**
- Richard M. Levy, Ph.D.
  - President and Chief Executive Officer
- Elisha W. Finney
  - Vice President, Finance
  - Chief Financial Officer
  - and Treasurer
- John C. Ford, Ph.D.
  - Vice President,
  - President, International Marketing Operations
- Timothy E. Guertin
  - Vice President,
  - President, Oncology Systems
- Robert H. Kluge
  - Vice President,
  - President, X-Ray Products
- Keith E. Krugman
  - Vice President,
  - Oncology Systems
  - Customer Support
- Joseph B. Phair
  - Vice President,
  - Administration,
  - General Counsel and Secretary
- Crisanto C. Raimundo
  - Corporate Controller
- George A. Zdašiuk, Ph.D.
  - Vice President,
  - Ginzton Technology Center

**Board of Directors**
- Richard W. Vieser
  - Chairman of the Board,
  - Varian Medical Systems, Inc.
  - Chairman, CEO, and President (Retired),
  - Lear Siegler, Inc.
- John Sedly Brown, Ph.D.
  - Chief Scientist and Vice President,
  - Xerox Corporation
- Samuel Hellman, M.D.
  - A.N. Pritzker Distinguished Service Professor,
  - Department of Radiation and Cellular Oncology,
  - University of Chicago
- Terry R. Lautenbach
  - Senior Vice President (Retired),
  - International Business Machines Corporation
- Richard M. Levy, Ph.D.
  - President and Chief Executive Officer,
  - Varian Medical Systems, Inc.
- David W. Martin, Jr., M.D.
  - President and Chief Executive Officer,
  - EOS Biotechnology, Inc.
- Burton Richter, Ph.D.
  - Paul Pigott Professor in Physical Sciences,
  - Stanford University;
  - Director Emeritus, Stanford Linear Accelerator Center

**Stockholder Information**

**World Headquarters**
Varian Medical Systems, Inc.
3100 Hansen Way
Palo Alto, CA 94304-1038
650.493.4000

**Stockholder Relations**
Copies of Varian's Annual Report on Form 10-K report filed with the Securities and Exchange Commission and other current financial information are available without charge by contacting Stockholder Relations: Varian Medical Systems, Inc.
3100 Hansen Way, M/S E-210
Palo Alto, CA 94304-1038
650.424.5853

To obtain information over the Internet, type www.varian.com at the URL prompt.

**Listings**
Varian's common stock is listed on the New York and Pacific Stock Exchanges. The symbol is VAR.

**Transfer Agent and Registrar**
First Chicago Trust Company of New York
P.O. Box 2500
Jersey City, NJ 07303
1.800.756.8200

**Stockholders' Meeting**
The annual meeting of stockholders will be held
February 8, 2001, at 1:00 p.m.,
at Little America Hotel & Towers,
500 So. Main Street,
Salt Lake City, Utah

**Stockholders of Record**
There were 4,488 stockholders of record of the company's common stock on 11/27/00.