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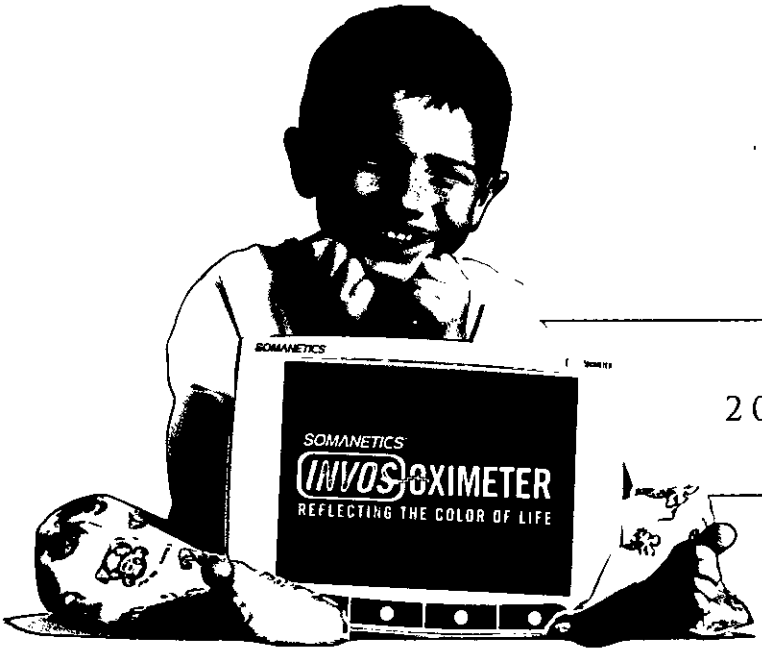


2008 ANNUAL REPORT

SOMANETICS

Throughout the year, we sponsored clinical research projects intended to develop the body of evidence related to the use of the INVOS System in the neonatal ICU.

Clinical research is addressing a wide range of topics. Research is being conducted to validate the accuracy, sensitivity and specificity of the INVOS System in monitoring the oxygen saturation of the brain, kidney and bowel. In addition, these studies have demonstrated the INVOS System's response to various drugs that are routinely used in the neonatal ICU. Other studies are evaluating the potential benefits of use of the INVOS technology to warn of developing situations such as shock and bowel ischemia and the INVOS System's response to certain clinical situations, such as reduced organ blood flow, cardiac arrest and anemia. Such research has shown that placing the sensors over the abdomen and flank provides important information about the bowel and kidney, respectively.

We also have sponsored research focused on establishing typical value ranges in neonates of varying gestational age and weight in the initial weeks of life.

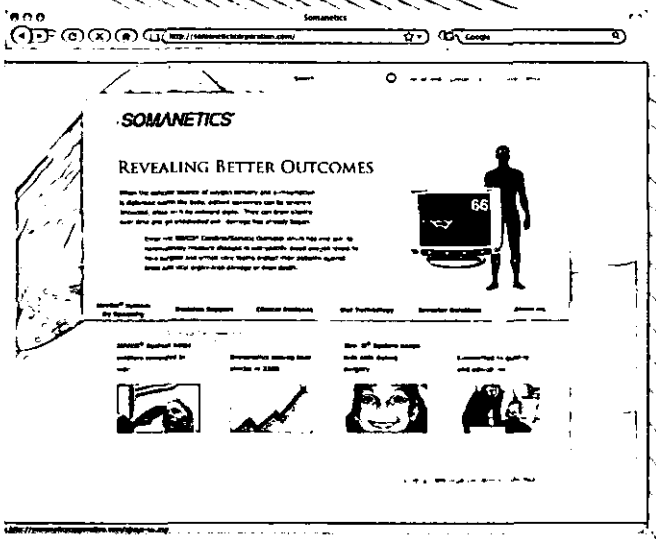
Early results from these activities are positive and results from numerous studies are expected to be presented and submitted for publication in 2009.

ADULT CARDIAC SURGERY

In January 2008, The Society of Thoracic Surgeons began collecting cerebral oximetry information as part of its STS Adult Cardiac Surgery Database. According to the STS, this database is the largest cardiothoracic surgery outcomes and quality improvement program in the world, and is viewed as the national gold standard for cardiothoracic surgery. This data is used for quality assessment in cardiothoracic surgery and has been used to establish benchmarks for clinical comparisons. We believe this data, which is expected to be reviewed, analyzed, presented and published over the next two years, if consistent with prior data, has the potential to drive further adoption of the INVOS System in cardiac surgery and establish our technology as a standard of care for this patient population.

ACQUISITION OF ICU DATA SYSTEMS, INC.

There is clinical desire in the acute care setting for data integration, storage and management that supports clinical decision making and research. In November 2008 we acquired substantially all of the assets of ICU Data Systems, Inc., a Gainesville, Florida-based business. ICU Data Systems has developed a patented technology that integrates data from bedside devices, such as physiological monitors, ventilators and infusion devices, into a single bedside display for comparison, data management and storage. We believe this new technology will advance and differentiate the INVOS System, accelerate



understanding and adoption of the INVOS System and provide us a new revenue generating product.

We completed the acquisition of ICU Data Systems in November for approximately $2 million in cash plus the assumption of minimal specified liabilities. The patent underlying the technology was licensed from the University of Florida and expires in 2023.

In the marketing of our INVOS technology, we have received numerous requests to combine INVOS System data with other bedside data. Acquiring ICU Data Systems provides us with a solution to respond to these customer demands.

With the ICU Data Systems technology, once data has been integrated into a single bedside system, several capabilities will be available.

- *Customize the display of any data integrated, all on the same timeline, for comparison in real-time.* Using a touch-screen display, a customer can easily add or subtract data or change the way it is presented. The patient history can be reviewed by zooming in on any time period with the touch of a finger.
- *Customize derived parameters.* Derived parameters are parameters generated from calculations based on two or more discrete measurements and these can be displayed in real-time and reviewed.
- *Customize event marks and alerts.* Event marks and alerts can be based on discrete or derived parameters or any combination of data that the customer selects and can be automated.
- *Store all data for inclusion in the patient record, or for research purposes.* The technology can reduce the labor and errors involved in manually gathering data from various devices for analysis. If desired, the device can be linked to the hospital information system.

In mid 2009, we plan to launch the ICU Data Systems technology in a stand-alone product. In this design, the INVOS System will interface with the ICU Data Systems platform the same way as other devices.

2008 HIGHLIGHTS

FISCAL 2008 FINANCIAL ACCOMPLISHMENTS

- Net revenues grew 23 percent to a record $47.5 million.
- U.S. net revenues increased 21 percent to $38.0 million.
- International net revenues increased 34 percent to $9.4 million.
- Income before income taxes increased 10 percent to a record $16.4 million.
- Net income was a record $10.4 million, or $0.76 per diluted share.
- Gross margin was 87 percent for 2008.

SALES AND MARKETING HIGHLIGHTS

- As of November 30, 2008, the U.S. installed base of INVOS System monitors was 2,523 in 714 hospitals.
- Worldwide, 424,647 INVOS System sensor units were sold in 2008.
- The Society of Thoracic Surgeons (STS) began collecting cerebral oximetry information as part of the STS Adult Cardiac Surgery Database. According to the STS, this database is the largest cardiothoracic surgery outcomes and quality improvement program in the world. Somanetics believes this data, which is expected to be reviewed, analyzed, presented and published over the next two years, if consistent with prior data, has the potential to drive further adoption of the INVOS System in cardiac surgery and establish it as a standard of care for this patient population.

NEONATAL ICU MARKET LAUNCH

- Somanetics launched its INVOS Cerebral/Somatic Oximeter in the neonatal intensive care unit in 2008.
- Labeling for the INVOS System was expanded to allow its use to monitor changes in oxygen saturation in any tissue beneath the sensor. In the neonatal patient, customers are placing sensors over various vital organs, such as the brain, kidneys and bowel.

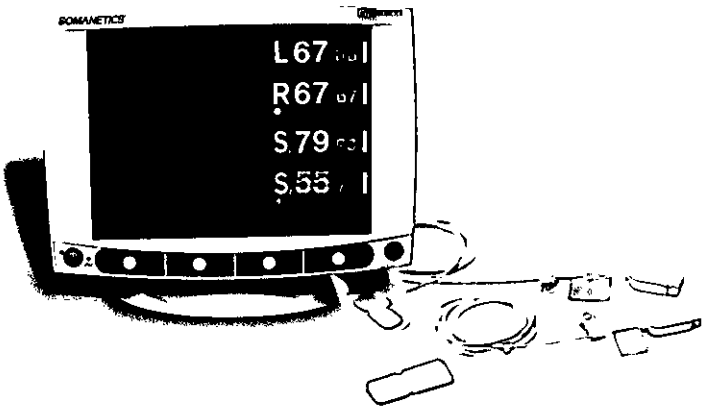
ACQUISITION OF ICU DATA SYSTEMS, INC.

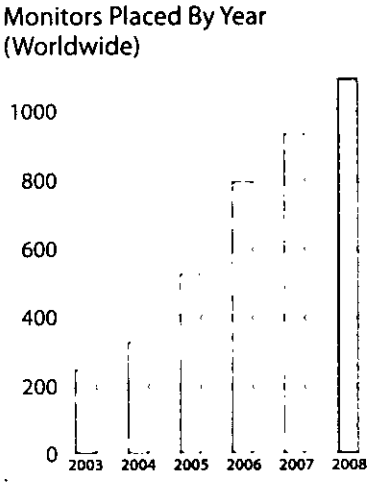
- In November 2008, Somanetics acquired substantially all of the assets of ICU Data Systems, Inc. of Gainesville, Florida, a company developing a technology to integrate data from bedside devices into a single display for comparison, data management and data storage.

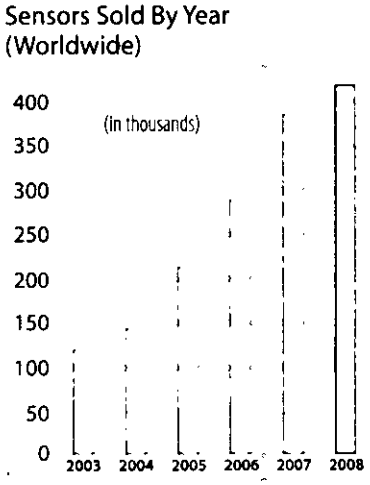
  The data integration technology is expected to allow:

  - Customized presentation of data from various bedside devices for comparison on the same display and on the same timeline.
  - Customized calculation and display of derived parameters, or calculated parameters based on the combination of two or more discrete parameters.
  - Creation of user-defined, automated event marks and alerts.
  - Storage of information for inclusion in the patient record and clinical research.

- Somanetics plans to further develop and launch the data integration technology as a stand-alone device in mid 2009. The INVOS System is one of many devices whose data can be integrated into the stand-alone device. Somanetics plans to combine the ICU Data Systems and INVOS System technologies into a single product for launch expected in the second half of 2010.



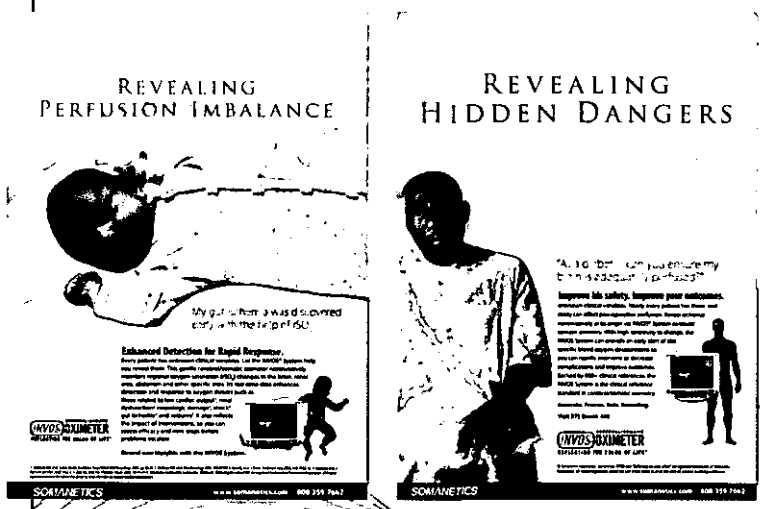




TO OUR SHAREHOLDERS

Somanetics Corporation delivered another year of record revenue and income before income taxes in 2008, reflecting continued market adoption of our INVOS System. We exited the year with a strong balance sheet, including approximately $70 million in cash, marketable securities and long-term investments and no borrowings.

Even more compelling were our strategic achievements that create important opportunities for our business.



Our INVOS Cerebral/Somatic Oximeter is a noninvasive patient monitoring system that provides information about changes in regional blood oxygen saturation in the brain and elsewhere in the body in tissues beneath the sensor in patients with or at risk for restricted blood flow. The INVOS System uses visible and near infrared spectroscopy to *reflect the color of life*® by identifying hemoglobin and oxygenated hemoglobin in the blood and measuring the relative amounts of each. The resulting regional oxygen saturation change information in conjunction with other available information can help critical care teams detect and correct site-specific blood oxygenation imbalances that can lead to complications and poor outcomes. The INVOS Cerebral/Somatic Oximeter can be used to monitor any individual, including adult, pediatric and neonatal patients, in any clinical setting where patients are at risk of reduced-flow or no-flow ischemia. Today the INVOS System is used at more than 700 U.S. hospitals.

PEDIATRIC AND NEONATAL MARKET AND RESEARCH

In 2008 we launched the INVOS System in the neonatal intensive care unit and we made progress developing our pediatric and neonatal market opportunities. Combined pediatric and neonatal sensor revenue increased 52 percent to $10.9 million in the year.

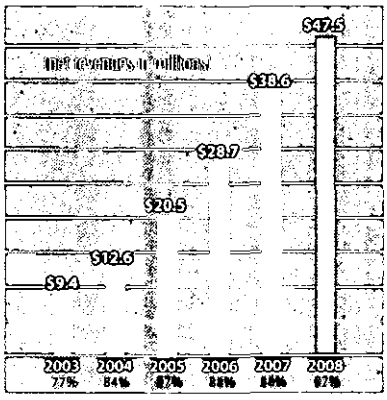
We also obtained FDA clearance for labeling that expanded the Indications for Use for the INVOS System to monitor changes in oxygen saturation in any tissue beneath the sensor. Previously, our labeling limited use to cerebral and skeletal muscle tissues. This expanded labeling is important for our efforts in the neonatal and pediatric ICU markets. The small size of these patients enables clinicians to use the INVOS System to monitor oxygen saturation in vital tissues other than the brain beneath the sensors.

FINANCIAL ACHIEVEMENTS

Fiscal year 2008 net revenues increased 23 percent to a record $47.5 million from $38.6 million in 2007. U.S. net revenues increased 21 percent to $38.0 million and international net revenues increased 34 percent to $9.4 million.

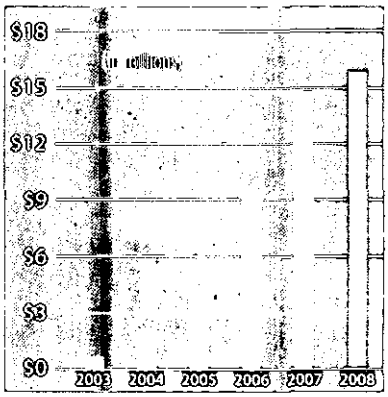
Gross margin as a percentage of net revenues was 87 percent for the year. Income before income taxes increased to a record $16.4 million from $14.9 million in 2007 and net income was $10.4 million, or $0.76 per diluted share. For the year, cash provided by operations was $15.9 million.

Financial Overview



Gross Margin

Income Before Income Taxes



To support the addition of the derived parameter features to the system, Somanetics will pursue a new FDA 510(k) clearance in 2009. We also are developing a next-generation INVOS System platform that integrates the ICU Data Systems technology. We plan to launch this product in the second half of 2010, after obtaining FDA 510(k) clearance.

The ability to integrate INVOS System and other bedside data should increase the value of the INVOS System, in part by materially differentiating our INVOS technology offering.

In addition to the value provided by combining the ICU Data Systems technology with the INVOS System, we believe the capabilities to be embodied in the ICU Data Systems technology will appeal to many acute care areas of the hospital that are not our current target market for the INVOS System. For example, there is potential for use of the INVOS System in adult ICU markets in a variety of applications. Combined ICU Data Systems and INVOS technologies may allow us to expand into adult ICU markets more quickly and productively than with the INVOS System alone.

2009 OUTLOOK

We enter 2009 with a strong balance sheet, including $70 million in cash, marketable securities and long-term investments, positive cash flow and additional business potential in front of us. However, we are assuming that the economic circumstances faced by our hospital customers will deteriorate further in 2009, slowing the pace of adoption of new technology and limiting capital spending. For this reason, we are forecasting that net revenues will increase approximately 15 percent in 2009 to $54.6 million.

Given our financial strength and growth opportunities, despite the economic environment, we are accelerating our investments in 2009 primarily to capitalize on our opportunities in the neonatal ICU and with the ICU Data Systems technology.

As a result of our investments, operating margin is forecast to be approximately 20 percent, with gross margin of approximately 86 percent. Income before income taxes is expected to be approximately $12 million.

The investments we are making will be focused in research and development, medical education and sales and marketing, including support for our international distributor.

In R&D, our largest investments will be to develop the stand-alone ICU Data Systems product for launch in mid 2009 and to develop an integrated ICU Data Systems and INVOS technology platform for launch in the second half of 2010. We believe the combination of these technologies will extend our technological leadership in the cerebral and other tissue oximetry market.

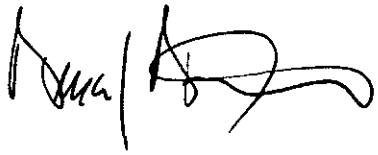
We plan to add resources to develop the neonatal ICU opportunity, including expanding our U.S. field clinical education and sales teams and increasing investment in medical education and marketing.

In international markets, we are in the process of hiring several sales personnel to support our distribution partner in Europe, and to lead the launch of the ICU Data Systems technology in Europe.

In summary, we have a strong cash, marketable securities and long-term investments position and technologies with market potential. We are investing to develop these opportunities and extend our technological leadership position. We estimate that our entry into the neonatal ICU approximately doubles our served market potential for the INVOS technology. Our early experience in the neonatal ICU market and initial research results are positive and encouraging. Advances to our labeling position us to capitalize on the opportunities to monitor tissues in addition to the brain in the pediatric and neonatal patients. The STS Database initiative provides us a catalyst that can potentially result in cerebral oximetry becoming a standard of care in the adult cardiac surgery market. And, the ICU Data Systems acquisition gives us an opportunity to extend our technological leadership position in the INVOS business and offer us a new revenue opportunity.

We delivered solid financial progress in 2008 in the face of a serious economic downturn, and we made significant progress positioning the business for the future. I want to thank our employees and business partners for their contributions to our growth and success, and thank you, our shareholders, for your interest in Somanetics Corporation.

Sincerely,



Bruce J. Barrett
President and Chief Executive Officer

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

FORM 10-K

(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended **November 30, 2008 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 **0-19095**

SOMANETICS CORPORATION

(Exact name of registrant as specified in its charter)

SEC Mail Processing
Section
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Washington, DC
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MICHIGAN (State or other jurisdiction of incorporation or organization)	**38-2394784** (I.R.S. Employer Identification No.)
1653 East Maple Road, Troy, Michigan (Address of principal executive offices)	**48083-4208** (Zip Code)

Registrant's telephone number, including area code: **(248) 689-3050**

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

Title of each class	Name of each exchange on which registered
Common Shares, par value $.01 per share	**The NASDAQ Stock Market**

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

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):
Large accelerated filer ☐ Accelerated filer ☒ Non-accelerated filer ☐ Smaller-reporting company ☐
(Do not check if a smaller reporting company)

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

The aggregate market value of the common shares held by non-affiliates of the registrant as of May 30, 2008 (the last business day of the registrant's most recently completed second fiscal quarter), computed by reference to the closing sale price as reported by NASDAQ on such date, was approximately $212,074,000.

The number of the registrant's common shares outstanding as of February 11, 2009 was 12,042,662.

Documents Incorporated by Reference

Portions of the Proxy Statement for the 2009 Annual Meeting of Shareholders, scheduled to be held April 23, 2009, are incorporated by reference in Part III, if the Proxy Statement is filed no later than March 30, 2009.

SOMANETICS CORPORATION

ANNUAL REPORT ON FORM 10-K

FOR THE FISCAL YEAR ENDED NOVEMBER 30, 2008

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PART I

ITEM 1. BUSINESS

Overview

We develop, manufacture and market the INVOS System, a non-invasive patient monitoring system that continuously measures changes in the blood oxygen levels in the brain and elsewhere in the body in tissues beneath the sensor in patients with or at risk for restricted blood flow. The brain is the organ least tolerant of oxygen deprivation. Without sufficient oxygen, brain damage may occur within minutes, which can result in paralysis, other disabilities or death. Brain oxygen information, therefore, is important, especially in surgical procedures requiring general anesthesia and in other critical care situations with a high risk of the brain getting less oxygen than it needs. The INVOS System consists of a portable monitoring system, including proprietary technology, which is used with multiple single-use disposable sensors, called SomaSensors or OxyAlert sensors. During our fiscal year ended November 30, 2008, net revenues from disposable sensors comprised approximately 72 percent of our net revenues. As of November 30, 2008, we had an installed base of 2,523 INVOS System monitors in the United States in 714 hospitals, and during fiscal 2008 we sold 424,647 sensors worldwide.

Clinical studies have shown that using the INVOS System to monitor and provide information to help manage the regional brain blood oxygen saturation of patients is associated with significantly fewer incidences of major organ dysfunction, which can significantly improve patient outcomes and reduce hospital costs. During fiscal 2004, the results of the first prospective, randomized, blinded intervention trial were presented, and the results were published in the January 2007 issue of a peer-reviewed anesthesia journal. The study showed that when the INVOS System was used to monitor and provide information to help manage the regional brain blood oxygen saturation of coronary artery bypass surgery patients, the occurrence of major organ morbidity or mortality was reduced from 11 percent to three percent and patients with major organ morbidity or mortality have significantly longer length of stay in the intensive care unit, or ICU, than those without. Additionally, in 2004, the results of a large retrospective review showed a statistically significant greater than 50 percent reduction (2.01 percent versus 0.97 percent) in the incidence of permanent stroke when information from the INVOS System was used to help manage brain blood oxygen saturation of cardiac surgery patients. The results also showed a reduced length of hospital stay and reduced incidence of prolonged ventilation when the INVOS System was used.

Our INVOS System has U.S. Food and Drug Administration, or FDA, clearance in the United States for use on adults, children and infants. We target the sale of the INVOS System for use in surgical procedures and other critical care situations with a high risk of oxygen imbalances. We initially focused our marketing efforts primarily on adult and pediatric cardiac surgeries and carotid artery surgeries. In the first quarter of fiscal 2005, we initiated selling and marketing efforts for the INVOS System in the pediatric ICU. We are currently expanding the use of our INVOS System in the pediatric and neonatal ICU's with the launch of our smaller sensor in the first half of fiscal 2008. Some of our potential future markets may include other major surgeries involving high risk patients. While our initial focus has been commercializing the INVOS System to measure blood oxygen saturation changes in the brain, many clinicians in the pediatric and neonatal ICU use the INVOS System to assess changes in oxygen saturation in regions of the body other than the brain in addition to cerebral oxygen saturation. In November 2005, we received 510(k) clearance from the FDA to market our INVOS System to monitor changes in somatic tissue blood oxygen saturation in regions of the body other than the brain in patients with or at risk for restricted blood flow. In May 2008, we received 510(k) clearance from the FDA to market our INVOS System to monitor changes in blood oxygen saturation in any tissues beneath the sensor, not limited to brain and somatic tissue, in any individual. Our four-channel cerebral and somatic INVOS System monitor, which we launched in the second quarter of 2006, can display information from four disposable sensors. This feature allows for the simultaneous monitoring of changes in blood oxygen saturation in tissues beneath the sensor in four different places in the body in patients with or at risk for restricted blood flow.

We are sponsoring and evaluating sponsorship of clinical trials which may allow us to more actively target the sale of the INVOS System for use in high risk patient populations. There are also numerous other independent clinical studies evaluating the use of the INVOS System.

In November 2008, we acquired substantially all of the assets of ICU Data Systems, Inc., a technology development company, for approximately $2,000,000 in cash plus the assumption of specified liabilities. ICU Data Systems has developed a patented technology that integrates data from a broad array of hospital bedside devices, such as physiological monitors, ventilators and infusion devices, into a single bedside display for comparison, data management and storage. We plan to further develop and launch our newly-acquired data integration technology as a stand-alone device in mid-2009. The INVOS System is one of many devices whose data can be integrated into the stand-alone device. To support the addition of the derived parameter features to the system, we will pursue a new FDA 510(k) clearance in 2009. In addition, we expect to invest to combine the ICU Data Systems and INVOS System technologies in a single product for launch expected in the second half of 2010. We also plan to pursue a new FDA 510(k) clearance for this integrated device in 2010.

We sell the INVOS System through a direct sales team in the United States, consisting of salespersons and clinical specialists, the size of which has increased from 44 persons at the end of fiscal 2006 to 55 persons at the end of fiscal 2008, and two independent sales representative firms. The direct sales team will also be expected to sell our integrated data device. Outside the United States, we market the INVOS System through independent distributors, including Covidien, formerly Tyco Healthcare, in Europe, Canada, the Middle East and South Africa, and Edwards Lifesciences Ltd. in Japan. We expect to increase the size of our U.S. direct sales team in fiscal 2009 and are planning to hire direct salespersons and clinical specialists in Europe to support Covidien and sell our integrated data device. Our net revenues have increased from $28.7 million in the fiscal year ended November 2006 to $47.5 million in fiscal 2008, representing a compounded annual growth rate of 28.6 percent. As a percentage of net revenues, our gross margin decreased from 88 percent in fiscal 2006 to 87 percent in fiscal 2008.

Our Corporate Information

We were incorporated under the laws of the State of Michigan in 1982. Our principal executive offices are located at 1653 East Maple Road, Troy, Michigan 48083-4208, and our telephone number is (248) 689-3050. Our website address is www.somanetics.com. The information on, or that can be accessed through, our website is not a part of this report. Unless the context indicates otherwise, as used in this report, the terms "Somanetics," "Somanetics Corporation," the "Company," "we," "us" and "our" refer to Somanetics Corporation, a Michigan corporation.

Somanetics®, INVOS®, SomaSensor®, Window to the Brain®, Reflecting the Color of Life®, Enlightening Medicine®, CorRestore®, OxyAlert®, OxyAlert NIRSensor®, and iCuro® are our United States registered trademarks. Each of the other trademarks, trade names or service marks appearing in this report is either pending registration or belongs to its respective holder.

Industry

Market Opportunity

We believe that in the United States in 2008 there were approximately five million surgeries involving elderly patients who, due to the type of surgery, age of the patient or other factors, have a higher risk of developing post-operative complications. Such surgeries include cardiac surgeries, carotid surgeries and other major general surgeries involving elderly patients. In addition, we believe that there are other patient populations, such as non-elderly adult, pediatric and neonatal patients, undergoing major surgeries and patients undergoing ICU treatment or in other critical care situations that face a high risk of tissue oxygen imbalances.

Hospitals in the United States have economic incentives to control health care costs. They often receive a fixed fee from Medicare, managed care organizations and private insurers based on the disease diagnosed, rather than on the services actually performed. Therefore, hospitals are increasingly focused on avoiding unexpected costs, such as those associated with increased hospital stays of patients with brain or other organ damage or other adverse outcomes following surgery or ICU treatment. The costs to the health care system associated with adverse surgical and ICU outcomes and lengthened hospital stays can be significant. In addition, lack of immediate knowledge about blood oxygen levels in areas such as the brain or other tissues can result in unnecessary medical treatments and associated costs. With the increasing focus by hospitals on avoiding unexpected costs, especially in the operating room, ICU and other critical care areas, we believe that there are significant incentives to evaluate and adopt new monitoring technologies which could provide information to improve patient care and reduce costs.

Brain Oxygen Imbalances and Its Effects

Oxygen is carried to the brain by hemoglobin in the blood. Hemoglobin passes through the lungs, bonds with oxygen and is pumped by the heart through arteries and capillaries to the brain. Brain cells extract oxygen and the blood carries away carbon dioxide through the capillaries and veins back to the lungs.

The brain is the human organ least tolerant of oxygen deprivation. Without sufficient oxygen, brain damage may occur within minutes, which can result in paralysis, severe and complex disabilities, or death. Undetected brain hypoxia, which is a condition in which there is a decrease of oxygen supply to the brain even though there is adequate blood flow, and ischemia, a condition in which blood flow, and thus oxygen, is restricted to a part of the body, are common causes of brain damage and death during and after many surgical procedures and in other critical care situations.

Brain oxygen imbalances can be caused by several factors, including changes in arterial blood oxygen saturation, which is the percentage of oxygenated hemoglobin contained in a given amount of blood which carries oxygen in the arteries to the tissues of the body, blood flow to the brain, hemoglobin concentration and oxygen consumption by the brain.

Brain oxygen information is important in surgical procedures requiring general anesthesia, in other critical care situations with a high risk of brain oxygen imbalances, as well as in the treatment of patients with head injuries or strokes. Once alerted to these imbalances, medical professionals can use this and other information to take corrective action through the introduction of medications, anesthetic agents or mechanical intervention, potentially improving patient outcomes and reducing the costs of care. Immediate and continuous information about changes in brain oxygen levels also provides immediate feedback regarding the adequacy of the selected therapy. Equally important, without information about brain oxygen levels, therapy that may not be necessary might be initiated in an attempt to ensure adequate brain oxygen levels and may have an adverse impact on patient safety and increase hospital costs.

Limitations of Traditional Monitoring Technologies

We believe that it is uncommon for patients undergoing surgery to receive any sort of direct neuromonitoring of brain blood oxygen saturation, in part due to some of the shortcomings of the traditional technologies. When patients are monitored directly, several different methods are used to detect one or more of the factors affecting brain oxygen levels or the effects of brain oxygen imbalances. These methods include invasive jugular bulb catheter monitoring, transcranial Doppler, electroencephalograms, or EEGs, intracranial pressure monitoring, and neurological examination. These methods have not been widely adopted to monitor brain oxygen levels in critical care situations for a variety of reasons. The use of these methods is limited because they are either expensive, difficult or impractical to use, invasive, not reliable under some circumstances, not organ specific, not able to measure more than one factor affecting oxygen imbalances in the brain, or not able to provide continuous information.

Our Solution

Our INVOS System is a non-invasive patient monitoring system that provides continuous information about changes in blood oxygen saturation levels. We believe that our INVOS System addresses the market's need for a solution that is non-invasive, continuous, immediate, effective and easy to use. The INVOS System, which is predominantly used in hospital critical care areas such as operating rooms and ICUs, consists of a portable monitoring system, including proprietary technology, which is used with multiple single-use disposable sensors. For multi-channel cerebral monitoring, disposable sensors are placed on both sides of a patient's forehead and are connected to the monitor. The INVOS System uses our proprietary technology to analyze information received from the disposable sensors and provides a continuous digital and trend display of an index of the blood oxygen saturation in the area of the body under the sensors. Our four-channel cerebral and somatic INVOS System monitor, which we launched in the second quarter of 2006, can display information from four disposable sensors. This feature allows for the simultaneous monitoring of changes in blood oxygen saturation in tissues beneath the sensor in four different places in the body in patients with or at risk for restricted blood flow.

Surgeons, anesthesiologists, pediatric and neonatal ICU physicians, and other medical professionals can use the information provided by the INVOS System, in conjunction with other available information, to identify brain and other tissue oxygen imbalances and take necessary corrective action, potentially improving patient outcomes and reducing the costs of care. Once the cause of a cerebral or other tissue oxygen imbalance is identified and therapy is initiated, the INVOS System provides immediate feedback regarding the adequacy of the selected therapy. It can also provide medical professionals with an additional level of assurance when they make decisions regarding the need for therapy.

Unlike some existing monitoring methods, the INVOS System functions even when the patient is unconscious, lacks a strong peripheral pulse or has suppressed neural activity. The measurement made by the INVOS System is dominated by information from the blood in the veins, where the balance of oxygen supply and demand can be more effectively assessed. Therefore, it responds to the changes in factors that affect the balance between oxygen supply and demand, including changes in arterial oxygen saturation, blood flow, hemoglobin concentration and oxygen consumption. The INVOS System responds to global changes in brain or other tissue oxygen levels and to events that affect oxygen levels in the region beneath the sensor.

The following table summarizes some of the principal features and related benefits of the INVOS System:

Features	Benefits
Non-invasive	• Reduced risk to patients and medical professionals • Consistent with market trend toward less invasive medical procedures
Continuous Information	• Immediate information regarding oxygen imbalances to help guide therapeutic interventions • Trend information, rather than at a single point in time
4-Channel Monitoring	• Simultaneous cerebral and other tissue monitoring • Provides more data points to help manage patient care
Cost-Effective	• Low cost relative to traditional brain monitoring methods • Small portion of the total cost of the procedures in which it is used • Information can potentially improve patient outcomes and reduce the overall cost of care
Easy to Use	• Does not require a dedicated technician to operate or interpret • Automatic sensor calibration • Simple user interface and controls
Effective in Difficult Circumstances	• Provides information when the patient is unconscious, lacks a strong peripheral pulse or has suppressed neural activity, specifically during cardiac arrest, hypothermia, hypertension, hypotension and hypovolemia
Portable/Compatible	• Placed at patient's bedside • Lightweight • Can be integrated or interfaced with existing multi-modality systems

ICU Data Systems, Inc.

In November 2008, we acquired substantially all of the assets of ICU Data Systems, Inc. ICU Data Systems has developed a patented technology that integrates data from a broad array of hospital bedside devices, such as physiological monitors, ventilators and infusion devices, into a single bedside display for comparison, data management and storage. The data integration technology allows customized presentation of data from various bedside devices for comparison on the same display and on the same timeline. The device can also calculate and display derived parameters, or calculated parameters based on the combination of two or more discrete parameters. In addition, the device can produce user-defined, automated event marks and alerts. All resulting information can be stored for inclusion in the patient record and clinical research.

We plan to further develop and launch our newly-acquired data integration technology as a stand-alone device in mid-2009. The INVOS System is one of many devices whose data can be integrated into the stand-alone device. To support the addition of the derived parameter features to the system, we will pursue a new FDA 510(k) clearance in 2009. In addition, we expect to invest to combine the ICU Data Systems and INVOS System technologies in a single product for launch expected in the second half of 2010. We also plan to pursue a new FDA 510(k) clearance for this integrated device in 2010.

Business Strategy

Our objective is to establish the INVOS System as a standard of care in surgical procedures requiring general anesthesia and in other critical care situations. Key elements of our strategy include to:

- ***Target Surgical Procedures and Other Critical Care Situations with a High Risk of Oxygen Imbalances.*** We target surgical procedures and other critical care situations with a high risk of oxygen imbalances. Some of our current and potential future markets include cardiac surgeries, carotid artery surgeries, pediatric and neonatal ICU applications and other major surgeries involving high risk patients. We believe that the medical professionals involved in these surgeries and ICU treatments are most aware of the risks of brain and other damage resulting from oxygen imbalances. Therefore, we believe that it will be easier to demonstrate the clinical importance of the information provided by the INVOS System to these professionals and potentially gain market acceptance for our products in connection with these surgeries and ICU treatments.

- ***Sponsor Clinical Studies to Promote Expanded Acceptance of the INVOS System.*** We believe that our INVOS System has been evaluated in over 600 presentations, study abstracts and published papers. During the second quarter of fiscal 2004, results of both the first prospective, randomized clinical trial and a larger retrospective review evaluating the INVOS System were presented, which we believe have contributed to the INVOS System gaining further market penetration. In addition, in January 2007 the results of the first prospective, randomized clinical trial mentioned above were published in a peer-reviewed anesthesia journal. We plan to sponsor clinical studies using the INVOS System to demonstrate its benefits. We are also sponsoring and evaluating sponsorship of other clinical trials which may allow us to more actively target the sale of the INVOS System for use in other high risk patient populations. We use the results of clinical studies to help convince the medical community of the clinical importance of the information provided by the INVOS System. We also sponsor peer-to-peer educational opportunities and promote use of the INVOS System in regional centers of influence that we believe will influence its adoption by others. In early 2008, The Society of Thoracic Surgeons began collecting cerebral oximetry information as part of its STS Adult Cardiac Surgery Database, which is used to develop practice standards intended to improve qualify and safety.

- ***Invest in Sales and Marketing Activities.*** We continue to increase our investment in our distribution network consisting of our direct sales employees, independent sales representative firms and distributors. We sell the INVOS System through a direct sales team in the United States, the size of which has increased from 44 persons at the end of fiscal 2006 to 55 persons at the end of fiscal 2008, and two independent sales representative firms. The direct sales team will also be expected to sell our integrated data device. We expect to increase the size of our U.S. direct sales team in fiscal 2009 and are planning to hire direct salespersons and clinical specialists in Europe to support Covidien. We participate in trade shows and medical conferences, ongoing peer-to-peer educational programs and targeted public relations opportunities.

- ***Interface and Integrate Our Technology into Other Manufacturers' Multi-Modality Systems.*** There are many existing monitoring systems in the operating room and the ICU. We would like to interface with these monitors. We have interfaced the INVOS System with the Philips Medical Systems' VueLink System to provide data, alarm events and status messages from the INVOS System on any monitor that accepts the VueLink module, a multi-parameter monitor. This enables oximetry data from our INVOS System to be displayed on the VueLink screen and integrated with other vital patient information. We plan to support the interface and integration of our INVOS System technology with other medical device

manufacturers to expand the installed base of INVOS System monitors and increase the demand for our sensors. We expect that such arrangements will provide another distribution channel for our INVOS System. We plan to further develop and launch our newly-acquired data integration technology as a stand-alone device in mid-2009. The INVOS System is one of many devices whose data can be integrated into the stand-alone device. In addition, we expect to invest to combine the ICU Data Systems and INVOS System technologies in a single product for launch expected in the second half of 2010. We also plan to pursue a new FDA 510(k) clearance for this integrated device in 2010.

- ***Develop Additional Applications and Markets for the INVOS System.*** We have developed a smaller sensor for use with infants, and are making other advances to the design and performance features of the INVOS System, including the disposable sensor. We are also evaluating additional potential market segments for our INVOS System, such as use in other major surgeries, in the adult ICU, and for applications of the technology to monitor other tissues. We are also exploring several novel near-infrared spectroscopy and imaging technologies and products under a Contract Development Agreement with Shirley Research Corporation. See "NeuroPhysics Corporation and Shirley Research Corporation" below. Pursuit of some of these potential market segments may require additional FDA clearance. We believe that these natural extensions of our technology will increase our market potential without the more significant risks and costs associated with developing entirely new products.

The INVOS System

Components of the INVOS System

The INVOS System consists of a portable monitoring system, including proprietary technology, which is used with multiple single-use disposable sensors.

- ***Monitor.*** Our oximeter is a portable monitor that uses our proprietary technology to analyze information received from the disposable sensors. It provides a continuous digital and trend display of an index of the oxygen saturation in the region of the body under the sensors. The monitor includes menus for users to set high and low audible alarms, customize the display and retrieve data. Single-function keys allow users to silence alarms, mark important events, store data for up to 28 surgical procedures, and retrieve data by USB storage device or through a direct link to a computer. Our four-channel cerebral and somatic INVOS System monitor, which we launched in the second quarter of 2006, measures approximately 11 inches wide, 9 inches high, and 7 inches deep and weighs approximately 11 pounds. We provide a one-year warranty on the monitor. As of November 30, 2008, we had an installed base of 2,523 INVOS System monitors in the United States in 714 hospitals.

- ***Disposable sensors.*** Each single-use disposable sensor contains a light source and two light detectors. For multi-channel cerebral monitoring, disposable sensors are placed on both sides of a patient's forehead and are connected to the monitor, which allows for monitoring both sides of the brain. Our four-channel cerebral and somatic INVOS System monitor, which we launched in the second quarter of 2006, can display information from four sensors. This feature allows for the simultaneous monitoring of changes in blood oxygen saturation in tissues beneath the sensors in four different places in the body in patients with or at risk for restricted blood flow. The number of sensors used depends on the application. The INVOS System is being used to monitor simultaneously the brain and other tissue initially for patients in the pediatric and neonatal ICU and for monitoring other, non-brain tissue alone, and we expect that it will later also be used on adults for other, non-brain tissue. The disposable sensors contain information that is processed by the INVOS System allowing it to automatically calibrate each sensor. During our fiscal year ended November 30, 2008, net revenues from our disposable sensors comprised approximately 72 percent of our net revenues. During fiscal 2008 we sold 424,647 sensors worldwide.

Overview of INVOS Technology

Our proprietary In Vivo Optical Spectroscopy, or INVOS, technology is based primarily on the physics of optical spectroscopy. Optical spectroscopy is the interpretation of the interaction between matter and light.

Spectrometers and spectrophotometers function primarily by shining light through matter and measuring the extent to which the light is transmitted through, scattered by or absorbed by the matter. Physicians and scientists can use spectrophotometers to examine human blood and tissue. Although most human tissue is opaque to ordinary light, some wavelengths penetrate tissue more easily than others. Therefore, by shining appropriate wavelengths of light into the body and measuring its transmission, scattering and absorption, or a combination of each, physicians can obtain information about the matter under analysis. Optical spectroscopy generates no ionizing radiation and produces no known hazardous effects.

By identifying the hemoglobin and the oxygenated hemoglobin and measuring the relative amounts of each, oxygen saturation of hemoglobin can be measured. However, traditional optical spectroscopy was generally not useful when the substances to be measured were surrounded by, were behind or were near bone, muscle or other tissue, because they produce extraneous data that interferes with analysis of the data from the area being examined.

We have developed a method of reducing extraneous spectroscopic data caused by surrounding bone, muscle and other tissue. This method, which is embedded in our INVOS System, allows us to gather information about portions of the body that previously could not be analyzed using traditional optical spectroscopy. The INVOS System measurement is made by our disposable sensors transmitting low-intensity visible and near-infrared light through a portion of the body and detecting the manner in which the molecules of the exposed substance interact with light at specific wavelengths.

Each single-use disposable sensor contains a light source and two light detectors. The dual detector design of the sensor enables us to measure scattered light intensities from the intermediate tissues of skin, muscle and bone in a separate process. While both detectors receive similar information about the tissue between the sensor and the area under examination, the detector further from the light source detects light that has penetrated deeper into the body, and, therefore, receives more information specific to the brain or other tissue under examination than does the detector closer to the light source. By comparing the two measurements, our INVOS technology is able to suppress the influence of the tissues between the sensor and the brain or other tissue under examination to provide a measurement of changes in brain or other tissue blood oxygen saturation.

Applications and Market Segments

We target the sale of the INVOS System for use in surgical procedures and other critical care situations with a high risk of oxygen imbalances. We believe that our INVOS System has applications for cerebral and other tissue monitoring in the following key market segments:

- ***Cardiac and Carotid Artery Surgery.*** Until the first quarter of fiscal 2005, we focused our marketing efforts primarily on cardiac and carotid artery surgeries. We believed it would be easier to demonstrate clinical importance of the information provided by the INVOS System and potentially gain market acceptance for our products in connection with these surgeries. Moreover, much of the earliest clinical data regarding the use of the INVOS System involved these surgeries. In September 2000, we received 510(k) clearance from the FDA to market the model 5100 INVOS System in the United States. Unlike earlier models, the model 5100 INVOS System has the added capability of being able to monitor pediatric patients. After receiving this clearance, we expanded our marketing efforts to include pediatric cardiac surgeries.

- ***Pediatric and Neonatal ICU.*** In the first quarter of fiscal 2005, we initiated selling and marketing efforts for the INVOS System in the pediatric ICU. We are currently expanding the use of our INVOS System in the pediatric and neonatal ICU's with the launch of our smaller sensor in the first half of fiscal 2008. Our four-channel cerebral and somatic INVOS System monitor, which we launched in the second quarter of 2006, can display information from four disposable sensors. This feature allows for the simultaneous monitoring of changes in blood oxygen saturation in tissues beneath the sensor in four different places in the body in patients with or at risk for restricted blood flow. The INVOS System is being used to monitor simultaneously the brain and other tissue initially for patients in the pediatric and neonatal ICU.

- ***Other Applications.*** We are also sponsoring and evaluating sponsorship of other clinical trials which may allow us to more actively target the sale of the INVOS System for use in other high risk patient populations. If the results of these trials are positive, following completion of these trials and publication of the results, we intend to target the sale of the INVOS System for use on high risk patients undergoing major surgeries. We are also evaluating additional potential market segments for our INVOS System, such as use in other major surgeries, in the adult ICU, and for applications of the technology in other tissues in the body.

In November 2008, we acquired substantially all of the assets of ICU Data Systems, Inc., a technology development company. See "ICU Data Systems, Inc." above. ICU Data Systems, Inc. has developed a patented technology that integrates data from a broad array of hospital bedside devices, such as physiological monitors, ventilators and infusion devices, into a single bedside display for comparison, data management and storage. We plan to further develop the newly-acquired data integration technology and launch a stand-alone device in mid-2009. In addition, we expect to invest in research and development to combine the ICU Data Systems and INVOS System technologies in a single product for launch expected in the second half of 2010. We believe that the markets for this data integration device are similar to the markets we are pursuing for the INVOS technology described above.

We are also exploring several novel near-infrared spectroscopy and imaging technologies and products under a Contract Development Agreement with Shirley Research Corporation. See "NeuroPhysics Corporation and Shirley Research Corporation" below. Pursuit of some of these potential market segments may require additional FDA clearance.

Clinical Development

We believe that favorable peer-reviewed publication is a key element to the INVOS System's success. Accordingly, we support clinical research programs with third-party clinicians and researchers intended to demonstrate the need for the INVOS System and the clinical importance of the information it provides with the specific objective of publishing the results in peer-reviewed journals. The research includes studies comparing patients managed using information provided by the INVOS System with other patients, based on measures of patient outcome and hospital costs, including patient length of stay, length of time on the ventilator, cognitive dysfunction and incidence of stroke. In addition to the studies described below, we believe that our INVOS System has been evaluated in over 600 presentations, study abstracts and published papers. During the second quarter of fiscal 2004, results of the studies described below were presented, which we believe have contributed to the INVOS System gaining further market penetration. In addition, in January 2007 the results of the first prospective, randomized clinical trial mentioned below were published in a peer-reviewed anesthesia journal.

Murkin Study

In the second quarter of 2004, the results of the first prospective, randomized, blinded intervention study using the INVOS System were presented. The study showed a statistically significant reduction in incidences of major organ dysfunction when the INVOS System was used to provide information to help manage regional brain blood oxygen saturation in coronary artery bypass surgery patients. The 200-patient study was conducted by John Murkin, M.D., professor of anesthesiology at the University of Western Ontario, and was presented at Outcomes 2004: Neurobehavioral Assessment, Physiological Monitoring and Cerebral Protective Strategies held in Key West, Florida. The data and results of the intervention study reported on by Dr. Murkin at Outcomes 2004 were published as John M. Murkin, M.D., et al., *Monitoring Brain Oxygen Saturation During Coronary Bypass Surgery: A Randomized, Prospective Study*, in Anesthesia and Analgesia. (January 2007).

Patients undergoing coronary artery bypass surgery were randomly assigned to the control or intervention group. Patients in both groups were monitored with the INVOS System during their operations, but the monitor display in the control group (100 patients) was covered and patients' treatments were managed routinely. In the intervention group (100 patients) the patients' treatments were managed using information from the INVOS System, and the patients received a pre-determined series of interventions to maintain the INVOS System's index of regional cerebral blood oxygen saturation within 75 percent of baseline values taken at the beginning of the operation.

Independent observers assessed all of the patients for predefined clinical outcomes. The complication criteria were those reported by cardiac surgeons to the Society of Thoracic Surgeons National Database. These complications consist of common adverse outcomes following cardiac surgery, such as stroke, respiratory failure, renal failure and other major morbidities.

Dr. Murkin found that regional brain oxygen desaturations were quite common and are related to major organ dysfunction. The intervention group experienced statistically significantly fewer incidents of major organ dysfunction than the control group: three patients in the intervention group experienced incidents of major organ morbidity or mortality, compared to 11 patients in the control group. With respect to stroke specifically, one patient in the intervention group experienced a stroke, compared to four patients in the control group. The difference was not statistically significant.

A financial analysis of Dr. Murkin's data was conducted by Leaden Hickman, Ph.D., assistant professor, health sciences and administration at the University of Michigan, and Dr. Murkin. This analysis was presented at Outcomes 2005: Neurobehavioral Assessment, Physiological Monitoring and Cerebral Protective Strategies held in Key West, Florida in May 2005. The analysis showed measurable cost differences between the intervention and control groups. Total cost per patient was lower in the intervention group than in the control group ($14,921 vs. $15,619). This difference was not statistically significant. The potential complication avoidance results in a total savings of $231,540, or a savings of $1,158 per patient averaged over the entire study group. The data and results of the financial analysis conducted by Leaden Hickman, Ph.D., and presented at Outcomes 2005, have not been published in a peer-reviewed publication.

Goldman Study

In the second quarter of 2004, the results of a retrospective, blinded intervention study using the INVOS System were presented. The study showed a statistically significant reduction in permanent stroke when information from the INVOS System was used to help manage regional brain blood oxygen saturation in cardiac surgery patients. The principal investigator in the 2,279-patient study was Scott Goldman, M.D., chairman of the department of surgery at Pennsylvania-based Main Line Health Center, Lankenau Hospital. Findings from the study were presented at the Cardiothoracic Techniques and Technologies Annual Meeting in March 2004 and were published as Scott Goldman, M.D., et al., *Optimizing Intraoperative Cerebral Oxygen Delivery Using Noninvasive Cerebral Oximetry Decreases the Incidence of Stroke for Cardiac Surgical Patients*, in The Heart Surgery Forum #2004-1062 (September 2004).

The study included all patients who underwent cardiac surgery for any reason at the Lankenau Hospital and Institute for Medical Research from July 1, 2000 to June 30, 2003. The control group consisted of 1,245 patients who underwent surgery in the 18 months before cerebral oximetry monitoring with the INVOS System was introduced at the hospital on January 1, 2002. The study group consisted of 1,034 patients who underwent surgery during the following 18 months and were monitored with the INVOS System. Operative techniques were modified in the study group to maintain cerebral oximetry values at or near the pre-operative baseline throughout the surgery. The study group included a significantly sicker population of patients than the control group, as determined by pre-operative New York Heart Association, or NYHA, classification and co-morbidities.

The incidence of permanent stroke in the study group (0.97 percent) was statistically significantly less than in the control group (2.01 percent), despite a sicker population according to the higher NYHA class of the study group. Although the incidence of permanent stroke was lower in the study group, the incidence of all neurologic dysfunction, including stroke and transient ischemic attack, was similar in the two groups. The proportion of patients requiring prolonged ventilation also was statistically significantly smaller in the study group, 6.8 percent, compared to 10.6 percent in the control group. Total ventilator time was statistically significantly shorter in the study group (four hours) than the control group (five hours). The length of hospital stay was similar overall in the two groups, but was statistically significantly shorter in the study group when examined by pre-operative NYHA classifications of patients.

Dr. Goldman's later analysis of these data concluded that the difference in incidence of cerebrovascular accidents, or CVA, between the two groups translated into a potential avoidance of 12 CVAs in the study group and approximately $254,214 in direct costs and more than $425,000 in total costs.

Diabetic Patients Studies

In the second quarter of 2005, Dr. Murkin presented the results of a 56-patient sub-study of his prospective, randomized, blinded intervention study using the INVOS System described above under "Murkin Study." The sub-study showed that avoidance of cerebral oxygen desaturations in actively managed diabetic coronary artery bypass graft patients was associated with improved clinical outcomes. The sub-study was presented at the Society of Cardiovascular Anesthesiologists 27th Annual Meeting in Baltimore. The data and results of the intervention study presented by Dr. Murkin in Baltimore have not been published in a peer-reviewed publication.

Diabetic patients have impaired cerebral autoregulation and oxygenation during cardiopulmonary bypass surgery. This sub-study analyzed outcomes of two coronary artery bypass graft patient groups: an intervention group of diabetic and non-diabetic patients who were monitored with the INVOS System and received a pre-determined series of interventions to maintain the INVOS System's index of regional cerebral blood oxygen saturation within 75 percent of baseline values taken at the beginning of the operation and a control group of diabetic and non-diabetic patients who were monitored with the INVOS System, but the display was covered and the patients were managed routinely. Diabetic patients in the intervention group required shorter ventilation (nine hours versus 30 hours), shorter stays in the ICU (30 hours versus 69 hours) and shorter hospital stays (5.5 days versus 8.4 days) than diabetic patients in the control group. All of these differences were statistically significant. There were no statistically significant differences between the regional cerebral oxygen saturation levels of the diabetic patients in the intervention group and the levels of the non-diabetic patients in the intervention group.

Other Future Studies

We are sponsoring and evaluating sponsoring other clinical trials which may allow us to more actively target the sale of the INVOS System for use in other high risk patient populations. In addition, in early 2008, The Society of Thoracic Surgeons began collecting cerebral oximetry information as part of its STS Adult Cardiac Surgery Database, which is used to develop practice standards intended to improve qualify and safety.

Marketing, Sales and Distribution

Marketing

We market the INVOS System primarily to cardiac and vascular surgeons, anesthesiologists, pediatric and neonatal ICU physicians, and other medical professionals. We believe that these specialists are the medical professionals most aware of the risks of brain and other damage resulting from oxygen imbalances. We believe that the data integration technology will be marketed to the same specialists and medical professionals as our INVOS technology.

We believe that favorable peer-reviewed publication is a key element to the INVOS System's success. Accordingly, we support clinical research programs with third-party clinicians and researchers intended to demonstrate the need for the INVOS System and the clinical importance of the information it provides with the specific objective of publishing the results in peer-reviewed journals. The research includes studies comparing patients managed based on information provided by the INVOS System with similarly situated patients not managed based on information provided by the INVOS System, based on measures of patient outcomes and hospital costs, including patient length of stay, length of time on the ventilator, cognitive dysfunction and incidence of stroke.

We attend trade shows and medical conferences to promote the INVOS System and to meet medical professionals with an interest in performing research and reporting their results in peer-reviewed medical journals and at major international medical conferences. We also sponsor peer-to-peer educational opportunities, promote use of the INVOS System in regional centers of influence that we believe will influence its adoption by others, and participate in targeted public relations opportunities.

Sales and Distribution

We sell the INVOS System through a direct sales team in the United States, the size of which has increased from 44 persons at the end of fiscal 2006 to 55 persons at the end of fiscal 2008, and two independent sales representative firms. The direct sales team will also be expected to sell our integrated data device. We expect to increase the size of our U.S. direct sales team in fiscal 2009. We believe the selling cycle for the INVOS System is approximately six to nine months, although given the current economic downturn in the United States and abroad, we believe that the sales cycle could be lengthened significantly.

Outside the United States, we have distribution agreements with independent distributors covering 64 countries for the INVOS System. Our distributors for the INVOS System include Covidien, formerly Tyco Healthcare, in Europe, the Middle East, South Africa and Canada, and Edwards Lifesciences Ltd., formerly Baxter Limited, in Japan. We are planning to hire direct salespersons and clinical specialists in Europe to support Covidien and to sell our integrated data device. We also have two international sales consultants. For fiscal 2008, 20 percent of our net revenues were represented by international sales.

We offer a no capital cost sales program in the United States whereby we ship the INVOS System monitor to the customer at no charge. It has been our experience that many hospitals in the United States prefer to use this method to acquire INVOS System monitors.

We did not have any backlog of firm orders as of January 10, 2009 or as of January 10, 2008. We generally do not have a backlog of firm orders because we generally ship product upon receipt of a customer order.

For a description of sales to major customers, see Note 9 of Notes to Financial Statements included in Item 8 of this report. Covidien, formerly Tyco Healthcare, was our largest customer in fiscal 2008, 2007 and 2006. We are dependent on our sales to Covidien and Edwards Lifesciences, and the loss of either of them as a customer would have an adverse effect on our business, financial condition and results of operations in the near-term, until such time as they could be replaced as our distributor in the respective market.

Our international sales were $9,420,472 for the fiscal year ended November 30, 2008, $7,024,902 for the fiscal year ended November 30, 2007 and $5,424,536 for the fiscal year ended November 30, 2006, including approximately $6,698,000 in fiscal 2008, $5,043,000 in fiscal 2007 and $4,211,000 in fiscal 2006 to Covidien, our distributor in Europe, the Middle East, South Africa and Canada, and approximately $2,118,000 in fiscal 2008, $1,431,000 in fiscal 2007 and $910,000 in fiscal 2006 to Edwards Lifesciences Ltd., our distributor in Japan. See Note 9 of Notes to Financial Statements. For a description of the breakdown of sales between INVOS System monitors and sensors, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations" in Item 7 of this report.

Research and Development

Our research and development activities are conducted internally by a staff consisting of 15 employees. We have developed a smaller sensor for use with infants and are making other advances to the design and performance features of the INVOS System, including the disposable sensor. We are also working to interface our INVOS System with multi-functional monitors provided by other manufacturers. We also plan to further develop our newly-acquired data integration technology as a stand-alone device. In addition, we plan to combine the ICU Data Systems and INVOS System technologies in a single product for launch in the second half of 2010. Our research, development and engineering expenditures were $1,259,227 during fiscal 2008, $668,815 during fiscal 2007 and $1,582,521 during fiscal 2006. We expect our research, development and engineering expenses to increase in fiscal 2009 primarily as a result of development costs associated with the acquired ICU Data Systems, Inc. technology, development costs associated with advances to the design and performance features of the INVOS System, including the disposable sensor, development costs associated with our Contract Development Agreement with Shirley Research Corporation, and the hiring of additional research and development personnel.

NeuroPhysics Corporation and Shirley Research Corporation

We entered into a Contract Development and Exclusive Licensing Agreement with NeuroPhysics Corporation as of September 18, 2006. The agreement provided us with feasibility research, contract development and consulting services and certain ownership and licensing rights, subject to the rights of the United States Federal government, to intellectual property and technical knowledge associated with several novel near-infrared spectroscopy, or "NIRS", and imaging technologies and products under development at NeuroPhysics. We paid an initial license fee of $1,000,000. We terminated this agreement in February 2009, except for various provisions regarding our ownership of the technology related to the potential new products. In February 2009, we entered into a similar agreement with Shirley Research Corporation and Hugh F. Stoddart and Hugh A. Stoddart, formerly of NeuroPhysics Corporation, and have agreed to pay monthly development and consulting fees of $15,000 a month during the term of the agreement and a royalty on future sales of the new products.

Shirley Research Corporation is in the early stage of feasibility research and development of several NIRS-based technologies and products, including a novel approach to depth resolved NIRS measurements. In addition to this NIRS-based, depth-resolved technology, products that may be developed under the agreement include (1) a fetal cerebral oximetry system, (2) a monitor for measuring oxygen saturation in deep tissues for assessing hemorrhagic shock, (3) devices to assess tumors or swelling containing blood, including in the brain of head trauma victims and neonates with intra-ventricular hemorrhage, (4) a continuous and non-invasive blood gas monitor, and (5) a new imaging concept intended to improve resolution and expand the applicability of endoscopes. We may terminate any or all of the projects under this agreement at any time. We might not be able to develop these technologies or products into commercially viable products, and competitors might develop and market similar products before we do.

Manufacturing

We assemble the INVOS System and intend to assemble our data integration device in our facilities in Troy, Michigan, from components purchased from outside suppliers. We assemble the INVOS System to control its quality and costs and to permit us to make changes to the INVOS System faster than we could if third parties assembled it. Although we believe that most components are generally available from several potential suppliers, we depend on one supplier for one of our components. We are not aware of any validated alternative supplier for this component, although we are currently in the process of evaluating a second source of supply and are carrying approximately a six-month supply of this component. Moreover, we typically use one supplier for custom-designed components, including the unit enclosure, the printed circuit boards, other mechanical components and the disposable sensor. We are currently dependent on one manufacturer of the sensor and another component of the INVOS System, and we believe that it would require approximately four to five months to change sensor suppliers. We do not currently intend to manufacture on a commercial scale the disposable sensor or the components of the INVOS System.

We received ISO 13485 certification and met the requirements under the European Medical Device Directive to use the CE Mark, thereby allowing us to continue to market our INVOS System and disposable sensor in the European Economic Community. Our most recent ISO 13485 compliance surveillance audit occurred in June 2008.

Competition

We believe that the markets for cerebral and somatic oximetry products may become highly competitive. In the United States, we believe there is currently only two other companies with FDA clearance to sell a cerebral oximeter. In December 2005, one U.S. competitor announced that it received 510(k) clearance to market a cerebral oximeter, and they began sales of their product during 2007. Outside the United States, several Japanese manufacturers offer competitive products for sale in that country and primarily for research in other parts of the world, but, to our knowledge, none has pursued FDA clearance to market its product in the United States. We are aware that several companies and individuals are engaged in the research and development of non-invasive cerebral oximeters, and we believe that there are several other potential entrants into the market. Other companies have FDA clearance to market somatic oximeters in the United States. Competition might cause our sales cycle to lengthen to the extent that customers take longer to make purchasing decisions. Competition might also reduce our gross

margins and market share and prevent us from achieving further market penetration. Competitors might be more successful than we are in obtaining FDA clearance with broader claims in their labeling or more successful than we are in manufacturing and marketing their products and may be able to take advantage of the significant time and effort we have invested to gain medical acceptance of cerebral oximetry.

We also compete with numerous medical equipment companies and medical device integration companies for the portions of hospital budgets allocated to capital equipment and for the limited amount of space on a patient's forehead for sensors. The medical products industry is characterized by extensive research and development and intense competition in an increasingly cost-conscious environment. Some of these potential competitors have well-established reputations, customer relationships and marketing, distribution and service networks. Some of them have substantially longer histories in the medical products industry, larger product lines and greater financial, technical, manufacturing, research and development and management resources than we do. Many of these potential competitors have long-term product supply relationships with our potential customers. These potential competitors might be able to use their resources, reputations and ability to leverage existing customer relationships to give them a competitive advantage over us, including in securing forehead sensor space for their products and dollars from hospital capital equipment budgets to purchase their products. They might also succeed in developing products that are at least as reliable and effective as our products, that make additional measurements, that are less costly than our products or that provide alternatives to our products. Competitors might be more successful than we are in manufacturing and marketing their products and may be able to take advantage of the significant time and effort we have invested to gain medical acceptance of cerebral oximetry.

We believe that a manufacturer's reputation for producing accurate, reliable, effective, sterile, patented and technically advanced products, clinical literature associated with leaders in the field, references from users, features (speed, safety, ease of use, patient and surgeon convenience and range of applicability), product effectiveness and price are the principal competitive factors in the medical products industry.

Proprietary Rights Information

We have 11 United States patents and two patents in various foreign countries. These patents expire on various dates from March 2009 to October 2019. We currently have five patent applications pending in the United States, including one reissuance application, and have patent applications in various foreign countries with respect to aspects of our technology relating to the interaction of light with tissue.

In September 2003, we were issued a new patent by the United States Patent and Trademark Office covering, among other things, the application of non-invasive, near-infrared spectroscopy to measure continuously and substantially concurrently a blood metabolite (such as oxygen saturation) in at least two separate internal regions of the brain. This patent is now the subject of a reissue proceeding in the United States Patent and Trademark Office. We requested the reissuance of this patent because we believe that we are entitled to broader claims than those that were originally issued. A competitor has requested re-examination of this patent, and the reissuance and re-examination proceedings have been combined. The outcome of the reissue and re-examination proceeding cannot be predicted, and the claims which ultimately issue may be broader in scope than the original claims, they may be narrower in scope than the original claims, they may be the same in scope as the original claims or they may be rejected. The corresponding Australian patent for "Multi-Channel, Noninvasive, Tissue Oximeter" issued in December 2003, will expire in October 2019. This patent is pending in other markets outside the United States. We believe the inventions covered in this patent are important to providing a high quality cerebral oximeter in the clinical setting.

Our other patents cover methods and apparatuses for introducing light into a body part and receiving, measuring and analyzing the transmitted light and its interaction with tissue. These methods also involve receiving, measuring and analyzing the light transmissivity of various body parts of a single subject, as well as of body parts of different subjects, which provides a standard against which a single subject can be compared.

Many other patents have previously been issued to third parties involving optical spectroscopy and the interaction of light with tissue, some of which relate to the use of optical spectroscopy in the area of brain metabolism monitoring, the primary use of the INVOS System. We are not aware of any infringement of the claims

of any issued patents by our products or by their methods of use, and no charge of patent infringement has been asserted against us.

In addition to our patent rights, we have obtained United States Trademark registrations for our trademarks "SOMANETICS," "INVOS," "SOMASENSOR," "WINDOW TO THE BRAIN," "REFLECTING THE COLOR OF LIFE," "ENLIGHTENING MEDICINE," "CORRESTORE," "OXYALERT," "OXYALERT NIRSENSOR," and "ICURO." United States Trademark applications for "AUC" and "AREA UNDER THE CURVE" have been allowed and United States Trademark applications for "SCR," "SCR" and design, "SOMANETICS ALLIANCE," and "SOMANETICS ALLIANCE" and design are pending. We have also obtained registrations of our basic mark, "SOMANETICS," in twelve foreign countries and the European Union and it is pending in two other foreign countries, and have the marks "BRAINSENSOR," "BRAINSENSOR SOMASENSOR," "INVOS," "INVOS" (transliteration), "OXYALERT," "OXYALERT" (stylized), "OXYALERT" (transliteration), "SOMANETICS" (transliteration), and "SOMASENSOR" registered or pending in other foreign countries.

We also rely on trade secret, copyright and other laws and on confidentiality agreements to protect our technology, but we believe that neither our patents nor our other legal rights will necessarily prevent third parties from developing or using a similar or a related technology to compete against our products. Moreover, our technology primarily represents improvements or adaptations of known optical spectroscopy technology, which might be duplicated or discovered through our patents, reverse engineering or both.

In addition, ICU Data Systems developed a patented technology that integrates data from a broad array of hospital bedside devices into a single bedside display for comparison, data management and storage. The patent underlying the technology is licensed by us from the University of Florida College of Medicine and Engineering and expires in 2023.

Government Regulation

Our products are medical devices subject to extensive regulation by the U.S. Food and Drug Administration, or FDA, under the Federal Food, Drug, and Cosmetic Act, or FDCA. FDA regulations govern, among other things, the following activities that we perform:

- product development;
- product testing;
- product manufacturing;
- product labeling;
- product storage;
- premarket clearance or approval;
- advertising and promotion;
- product sales and distribution; and
- product event reports and complaint handling.

Medical devices to be commercially distributed in the U.S. must receive either 510(k) clearance or a Pre Market Approval, or "PMA", from the FDA pursuant to the FDCA, prior to marketing. Devices deemed to pose relatively less risk are placed in either class I or II, which requires the manufacturer to submit a premarket notification requesting permission for commercial distribution; this is known as 510(k) clearance. Some low risk devices are exempted from this requirement. Devices deemed by the FDA to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices, or devices deemed not substantially equivalent to a previously 510(k) cleared device or a preamendment class III device for which PMA applications have not been called, are placed in class III requiring PMA approval.

510(k) Clearance Pathway. To obtain 510(k) clearance, a manufacturer must submit a premarket notification demonstrating that the proposed device is substantially equivalent in intended use and in safety and effectiveness to a previously 510(k) cleared device or a device that was in commercial distribution before May 28, 1976 for which the FDA has not called for submission of PMA applications. The FDA's 510(k) clearance pathway usually takes from three to six months, but it can last longer.

After a device receives 510(k) clearance, any modification that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, requires a new 510(k) clearance or could require a PMA approval. 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 a manufacturer's decision not to seek a new 510(k) clearance, the agency may retroactively require the manufacturer to seek 510(k) clearance or PMA approval. The FDA also can require the manufacturer to cease marketing and/or recall the modified device until 510(k) clearance or PMA approval is obtained, to redesign the device or to submit new data or information to the FDA.

PMA Approval Pathway. A product not eligible for 510(k) clearance must follow the PMA approval pathway, which requires proof of the safety and effectiveness of the device to the FDA's satisfaction. The PMA approval pathway is much more costly, lengthy and uncertain. It generally takes from one to three years or even longer. A PMA application must provide extensive preclinical and clinical trial data and also information about the device and its components regarding, among other things, device design, manufacturing and labeling. As part of the PMA review, the FDA will typically inspect the manufacturer's facilities for compliance with Quality System Regulation, or QSR, requirements, which impose elaborate testing, control, documentation and other quality assurance procedures. The PMA can include postapproval conditions that the FDA believes necessary to ensure the safety and effectiveness of the device including, among other things, restrictions on labeling, promotion, sale and distribution. Failure to comply with the conditions of approval can result in material adverse enforcement action, including the loss or withdrawal of the approval. Even after approval of a PMA, a new PMA or PMA supplement is required in the event of certain modifications to the device, its labeling or its manufacturing process. Supplements to a PMA often require the submission of the same type of information required for an original PMA, except that the supplement is generally limited to that information needed to support the proposed change from the product covered by the original PMA.

Clinical Trials. A clinical trial is almost always required to support a PMA application and is sometimes required for a premarket notification. All clinical studies of investigational devices must be conducted in compliance with FDA's requirements. If an investigational device could pose a significant risk to patients (as defined in the regulations), the FDA must approve an Investigational Device Exemption, or IDE, application prior to initiation of investigational use. An IDE application must be supported by appropriate data, such as animal and laboratory test results, showing that it is safe to test the device in humans and that the testing protocol is scientifically sound. FDA typically grants IDE approval for a specified number of patients to be treated at specified study centers. A nonsignificant risk device does not require FDA approval of an IDE. Both significant risk and nonsignificant risk investigational devices require approval from institutional review boards, or IRBs, at the study centers where the device will be used or from private IRBs.

During the study, the sponsor must comply with the FDA's IDE requirements for investigator selection, trial monitoring, reporting, and record keeping. The investigators must obtain patient informed consent, rigorously follow the investigational plan and study protocol, control the disposition of investigational devices, and comply with all reporting and record keeping requirements. Most IDE requirements apply to all investigational devices, whether considered significant or nonsignificant risk. Prior to granting PMA approval and at times 510(k) clearance, the FDA typically inspects the records relating to the conduct of the study and the clinical data supporting the application for compliance with IDE requirements.

Postmarket. After a device is placed on the market, numerous regulatory requirements apply. These include: the QSR, labeling regulations, the FDA's general prohibition against promoting products for unapproved or "off-label" uses, the Medical Device Reporting regulation (which requires that manufacturers report to the FDA if their device 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 it were to recur), and the Reports of Corrections and Removals regulation (which requires manufacturers to report recalls, field and other remedial actions to the FDA if initiated to reduce a risk to health posed by the device or to remedy a violation of the Federal Food, Drug, and Cosmetic Act caused by the device that may present a risk to health, and maintain records of other corrections or removals).

FDA enforces these requirements by inspection and market surveillance. If the FDA finds a violation, it can institute a wide variety of enforcement actions, ranging from a public warning letter to more severe sanctions such as:

- fines, injunctions, consent decrees and civil penalties;
- repair, replacement, refunds, recall or seizure of products;
- limitations on exports;
- operating restrictions or partial suspension or total shutdown of production;
- refusing or delaying our requests for 510(k) clearance or PMA approval of new products or new intended uses;
- withdrawing 510(k) clearance or PMA approvals already granted; and
- criminal prosecution.

In October 1997, we obtained FDA clearance for an earlier generation INVOS System incorporating advances in our INVOS technology. In September 2000, we received 510(k) clearance from the FDA to market the model 5100 INVOS System in the United States. Unlike earlier models, the model 5100 INVOS System has the added capability of being able to monitor pediatric patients. In November 2005, we received 510(k) clearance from the FDA to market our INVOS System to monitor changes in somatic tissue blood oxygen saturation in regions of the body other than the brain in patients with or at risk for restricted blood flow. In May 2008, we received 510(k) clearance from the FDA to market our INVOS System to monitor changes in blood oxygen saturation in any tissues beneath the sensor, not limited to brain and somatic tissue, in any individual. Our most recent FDA QSR inspection occurred in May 2007.

If any of our current or future FDA clearances or approvals are rescinded or denied, sales of our applicable products in the United States would be prohibited during the period we do not have such clearances or approvals. In such cases we would consider shipping the product internationally and/or assembling it overseas if permissible and if we determine such product to be ready for commercial shipment. The FDA's current policy is that a medical device that is not in commercial distribution in the United States, but which needs 510(k) clearance to be commercially distributed in the United States, can be exported without submitting an export request and prior FDA clearance under certain conditions.

Congress has enacted the Medical Device User Fee Modernization Act of 2007 and the Food and Drug Administration Amendment Act of 2007. Among other things, these laws change provisions which permit the assessment of user fees for product approvals and clearances. Given the recent enactment of this law, the effect of the law as it relates to us and our products is still unknown, other than that we will have to pay the FDA to review our 510(k) submissions or our PMA submissions if we make any. We do not currently have any 510(k) submissions pending.

We are also subject to numerous federal, state and local laws relating to such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control and disposal of hazardous or potentially hazardous substances.

Seasonality

Our business is seasonal. Our fourth quarter has typically been our strongest quarter due to a larger number of patients undergoing procedures using the INVOS System, including sensors, and higher INVOS System monitor revenues associated with hospital budgeting cycles.

Employees

As of February 6, 2009, we had 115 full-time employees, including 63 in sales and marketing, 15 in research and development, 13 in general and administration and 24 in manufacturing, quality and service. We also employed one part-time individual in general and administration. In addition, we use four contract employees, and we use two consultants. Included in the employee numbers above are three research and development employees and one clinical education employee that became our employees upon our acquisition of ICU Data Systems, Inc.'s assets in November 2008. We believe that our future success is dependent, in large part, on our ability to attract and retain highly qualified managerial, sales, marketing, technical and manufacturing personnel. We expect to add additional sales and marketing and research and development employees in fiscal 2009. Our employees are not

represented by a union or subject to a collective bargaining agreement. We believe that our relations with our employees are good.

Insurance

Because the INVOS System and the data integration device are intended to be used in hospital critical care units with patients who may be seriously ill or may be undergoing dangerous procedures, we might be exposed to serious potential product liability claims. We have obtained product liability insurance with a liability limit of $5,000,000. We also maintain coverage for property damage or loss, general liability, business interruption, travel-accident, directors' and officers' liability and workers' compensation. We do not maintain key-man life insurance.

Where You Can Get Information We File With The SEC

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You can read and copy any materials we file with the Securities and Exchange Commission at the Securities and Exchange Commission's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the Securities and Exchange Commission at 1-800-SEC-0330. The Securities and Exchange Commission also maintains an Internet site that contains reports, proxy and information statements and other information regarding issuers, such as us, that file electronically with the Securities and Exchange Commission. The address of the Securities and Exchange Commission's website is http://www.sec.gov.

We also maintain a website at http://www.somanetics.com. We make available free of charge on or through our website, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission. We will voluntarily provide electronic or paper copies of our filings free of charge upon request.

This report includes statistical data that were obtained from industry publications. These industry publications generally indicate that the authors of these publications have obtained information from sources believed to be reliable but do not guarantee the accuracy and completeness of their information. While we believe these industry publications to be reliable, we have not independently verified their data.

ITEM 1A. RISK FACTORS

An investment in our common shares involves a high degree of risk. You should carefully consider the specific factors described below, together with the cautionary statement under the caption "Forward - Looking Statements" below and in Item 7 of this report and the other information included in this report, before purchasing our common shares. The risks described below are not the only ones that we face. Additional risks that are not yet known to us or that we currently think are immaterial could also impair our business, financial condition or results of operations. If any of the following risks actually occurs, our business, financial condition or results of operations could be adversely affected. In such case, the trading price of our common shares could decline, and you may lose all or part of your investment.

Risks Relating to Our Business

Our future growth depends on increased market acceptance of our INVOS System in existing market segments and market acceptance in new market segments.

Since sales of the INVOS System, including disposable sensors, currently account for substantially all of our revenues, our future growth will depend on the degree to which our INVOS System is accepted by hospitals and clinicians in our existing market segments and in new market segments, such as the neonatal ICU, major surgeries involving high risk patients and other applications. There are numerous factors that could adversely impact market acceptance of our INVOS System.

Part of our marketing strategy is to encourage and support clinical research programs. We depend on favorable peer-reviewed publication and successful clinical use of our products for our success. The INVOS System has not had extensive clinical use in the new market segments. We cannot assure you that additional research papers will be published or that any such papers will conclude that the INVOS System provides information that is clinically important. In addition, researchers might publish results that do not support the clinical importance of the information provided by the INVOS System or that conclude that another product provides better or more important information. Performance problems or adverse research results could prevent acceptance of the product in existing and new market segments, adversely affect our reputation in the medical community, result in unexpected expense and adversely affect future sales.

In addition, we compete with numerous medical equipment companies and medical device integration companies for the portions of hospital budgets allocated to capital equipment and for the limited amount of space on a patient's forehead for sensors. Sales of our INVOS System and data integration device might be limited or delayed because of resistance to major capital equipment expenditures by hospital purchasing committees. Even if we are successful in convincing physicians, other medical professionals and hospital purchasing committees that the INVOS System or data integration device provides valuable benefits, they might be unwilling or unable to commit funds to the purchase of the INVOS System or data integration device due to budgetary constraints. Moreover, even if one or two units are sold to a hospital, we believe that it will take additional time and experience with the INVOS System or data integration device before additional medical professionals in the hospital might be interested in using the INVOS System in other procedures or other areas of the hospital.

Sales of all of our products might be limited because hospitals might fear that the cost of a new device or product will lower their profits because medical insurers generally fix reimbursement amounts for the procedures in which our products might be used. Moreover, medical professionals may be reluctant to use our INVOS System or data integration device in some new market segments, particularly those involving diagnostic applications, unless they receive reimbursement from medical insurers for using the system. Our INVOS System is not currently cleared by the FDA for use in the diagnosis of disease states. Additionally, the INVOS System or data integration device is not currently approved for separate reimbursement, and we might not be able to obtain reimbursement for these uses of our INVOS System.

If the INVOS System or data integration device fails to achieve market acceptance in existing or new market segments or if these market segments fail to develop as rapidly as expected, our business, financial condition and results of operations could be adversely affected and our plan to increase our investments in our direct sales team and our research and development team might not produce favorable results.

We are dependent on our international distributors for a substantial portion of our sales, and their failure to sell our products adequately would adversely affect our business.

We are dependent on our distributors to generate all of our international sales. These independent distributors might fail to commit the necessary resources to market and sell our products to the level of our expectations, especially as significant customer education and long lead times are typically required to market and sell our products successfully. If our distributors fail to market, promote and sell our products adequately, our business, financial condition and results of operations would be adversely affected. We might not be able to engage additional distributors on a timely basis, enter into other third-party marketing arrangements or retain or replace our existing distributors, when required. If we are unable to engage, replace or retain distributors, our ability to market and sell our products internationally could be adversely affected. In addition, if any of our distributor arrangements are terminated or discontinued, we will likely be faced with increased costs as we attempt to replace these arrangements, and the terminated distributors might begin to sell a competitor's product. Even if we are able to engage new distributors or retain existing ones, they might incur conflicting obligations to sell other companies' products or they might distribute other products that provide greater revenues to them than are provided by our products.

Covidien, formerly Tyco Healthcare, our international distributor in Europe, the Middle East, South Africa and Canada for our INVOS System, accounted for 14 percent, 13 percent and 15 percent of our net revenues for fiscal years 2008, 2007 and 2006, respectively, and our current Distribution Agreement with them expires on February 10, 2010. Edwards Lifesciences Ltd., formerly Baxter Limited, is our international distributor in Japan for our INVOS System. The loss of either of these distributors could have an adverse effect on our business, financial condition and results of operations.

The recent global economic crisis has had and may continue to have a negative effect on our business and operations.

The recent global economic crisis has caused, among other things, lower business spending, which has had and is expected to continue to have a negative effect on our business and results of operations, including an increase in the sales cycle for our products and a reduction in our expected net revenues in fiscal 2009. Many of our customers and suppliers have been affected by the current economic turmoil. Current or potential customers and suppliers may no longer be in business, may be unable to fund purchases or determine to reduce purchases, all of which has led and is expected to continue to lead to reduced demand for our products and increased customer payment delays. Further, suppliers may not be able to supply us with needed components on a timely basis, may increase prices or go out of business, which could result in our inability to meet customer demand or affect our gross margins. The timing and nature of any recovery in the economy remains uncertain, and there can be no assurance that market conditions will improve in the near future or that our results will not be materially and adversely affected. Such conditions make it very difficult to forecast operating results, make business decisions and identify and address material business risks.

We currently depend on single-source suppliers for key components of the INVOS System, and the loss of any of these suppliers could harm our ability to manufacture and sell our products, increase the cost of our components or delay our clinical trials.

We are dependent on various suppliers for manufacturing the components for our INVOS System and data integration device. Although we believe that most components are generally available from several potential suppliers, we depend on one supplier for one of our components. We are not aware of any validated alternative supplier for this component, although we are currently in the process of evaluating a second source of supply. Moreover, we typically use one supplier for custom-designed components, including the unit enclosure, the printed circuit boards, other mechanical components and the disposable sensor. Sensors represented approximately 72 percent of our net revenues in fiscal 2008. Engaging additional or replacing existing suppliers of custom-designed components is costly and time consuming. We estimate that it would require approximately four to five months to change sensor suppliers. We do not intend to maintain significant inventories of components, other than an approximate six-month supply of the one component for which we currently have no alternative supplier. If we fail to obtain custom-designed components from our sole suppliers, if we lose any of our present suppliers and cannot replace them on a timely basis when necessary, if there is an interruption of production at one or more of our

suppliers, or if any supplier is otherwise unable or unwilling to meet our requirements at current prices or at all, our ability to manufacture and sell our products would be impaired or we might have to pay higher prices for our components or our clinical trials could be delayed. In addition, because we do not have long-term agreements with our suppliers, we might be subject to unexpected price increases which might adversely affect our profit margins.

In addition, we do not have direct control over the activities of our suppliers and are dependent on them for quality control, capacity, processing technologies and, in required cases, compliance with FDA Quality System Regulation requirements. If we are unsuccessful in managing our suppliers, our business could be adversely affected.

We may become subject to competition which may adversely affect us.

We believe that the markets for cerebral and somatic oximetry products and for medical data integration devices may become highly competitive. In the United States, we believe there is currently only two other companies with FDA clearance to sell a cerebral oximeter. In December 2005, one U.S. competitor announced that it received 510(k) clearance to market a cerebral oximeter, and they began sales of their product during 2007. Outside the United States, several Japanese manufacturers offer competitive products for sale in that country and primarily for research in other parts of the world, but, to our knowledge, as of yet, none has pursued FDA clearance to market its product in the United States. We are aware that several companies and individuals are engaged in the research and development of non-invasive cerebral oximeters, and we believe that there are several other potential entrants into the market. Other companies have FDA clearance to market somatic oximeters in the United States. Competition might cause our sales cycle to lengthen to the extent that customers take longer to make purchasing decisions. Competition might also reduce our gross margins and market share and prevent us from achieving further market penetration. Competitors might be more successful than we are in obtaining FDA clearance with broader claims in their labeling or more successful than we are in manufacturing and marketing their products and may be able to take advantage of the significant time and effort we have invested to gain medical acceptance of cerebral oximetry.

We believe there are numerous competitors in the medical device integration market. Some of these competitors have well-established reputations, customer relationships and marketing, distribution and service networks. Some of them have substantially longer histories in the medical products industry, larger product lines and greater financial, technical, manufacturing, research and development and management resources than we do. Many of these potential competitors have long-term product supply relationships with our potential customers. However, we plan to further develop our newly-acquired data integration technology to include derived parameter features which we believe will differentiate our technology offering.

We also compete with companies that have longer operating histories, more established products and greater resources than we do for, among other things, forehead monitoring space, limited hospital capital budgets and alternative products.

The medical products industry is characterized by extensive research and development and intense competition in an increasingly cost-conscious environment. Some of these potential competitors have well-established reputations, customer relationships and marketing, distribution and service networks. Some of them have substantially longer histories in the medical products industry, larger product lines and greater financial, technical, manufacturing, research and development and management resources than we do. Many of these potential competitors have long-term product supply relationships with our potential customers. These potential competitors might be able to use their resources, reputations and ability to leverage existing customer relationships to give them a competitive advantage over us, including in securing forehead sensor space for their products and dollars from hospital capital equipment budgets to purchase their products. They might also succeed in developing products that are at least as reliable and effective as our products, that make additional measurements, that are less costly than our products or that provide alternatives to our products.

If we fail to manage our growth effectively, our business and operating results could be harmed.

If we experience growth in our business, our growth could place a significant strain on our management, customer service, operations, sales and administrative personnel and other resources. To serve the needs of our

existing and future customers, we will be required to train, motivate and manage qualified employees. We have incurred and will continue to incur significant costs to retain qualified management, sales and marketing, engineering, production, manufacturing and administrative personnel, as well as expenses for marketing and promotional activities. Our ability to manage our planned growth depends upon our success in expanding our operating, management and information and financial systems, which might significantly increase our operating expenses.

We have invested substantial resources to develop the INVOS System. We expect to continue to invest resources to develop advances to the design and performance features of the INVOS System, including the disposable sensor, to interface our INVOS System with multi-functional monitors provided by other manufacturers, to further develop our newly-acquired data integration technology as a stand-alone device, and to combine the ICU Data Systems and INVOS System technologies in a single product. New products require extensive testing and regulatory clearance before they can be marketed, and substantial customer education concerning the product's use, advantages and effectiveness. We might not be able to develop commercially viable products. We might not be able to manage effectively our future growth, and if we fail to do so, our business, financial condition and results of operations would be adversely affected.

Patients might assert product liability claims against us.

Because we test, market and sell patient monitoring devices, patients might assert product liability claims against us. The INVOS System and the data integration device are used in operating rooms and other critical care hospital units with patients who might be seriously ill or might be undergoing dangerous procedures. On occasion, patients on whom the INVOS System or data integration device is being used may be injured or die as a result of their medical treatment or condition. We might be sued because of such injury or death, and regardless of whether we are ultimately determined to be liable or our products are determined to be defective and a contributing factor in such injury or death, we might incur significant legal expenses not covered by insurance. In addition, product liability litigation could damage our reputation and impair our ability to market our products, regardless of the outcome. Litigation could also impair our ability to retain product liability insurance or make our insurance more expensive. We have product liability insurance with a liability limit of $5,000,000. This insurance is costly and even though it has been obtained, we might not be able to retain it. Even if we are able to retain this insurance, it might not be sufficient to protect us in the event of a major defect in the INVOS System. If we are subject to an uninsured or inadequately insured product liability claim based on the performance of the INVOS System, our business, financial condition and results of operations could be adversely affected.

If we fail to obtain and maintain necessary U.S. Food and Drug Administration clearances for our products and indications or if clearances for future products and indications are delayed or not issued, our business would be harmed.

Our products are classified as medical devices and are subject to extensive regulation in the United States by the FDA and other federal, state and local authorities. These regulations relate to manufacturing, labeling, sale, promotion, distribution, importing and exporting and shipping of our products. In the United States, before we can market a new medical device, or a new use of, or claim for, an existing product such as the INVOS System or our data integration device, we must first receive either 510(k) clearance or premarket approval from the FDA, unless an exemption applies. Both of these processes can be expensive and lengthy. The FDA's 510(k) clearance process usually takes from three to six months, but it can last longer. The process of obtaining premarket approval is much more costly and uncertain than the 510(k) clearance process. It generally takes from one to three years, or even longer, from the time the premarket approval application is submitted to the FDA until an approval is obtained.

In order to obtain premarket approval and, in some cases, a 510(k) clearance, a product sponsor must conduct well-controlled clinical trials designed to test the safety and effectiveness of the product. Conducting clinical trials generally entails a long, expensive and uncertain process that is subject to delays and failure at any stage. The data obtained from clinical trials may be inadequate to support approval or clearance of a submission. In addition, the occurrence of unexpected findings in connection with clinical trials may prevent or delay obtaining approval or clearance. If we conduct clinical trials, they may be delayed or halted, or be inadequate to support approval or clearance.

Medical devices may be marketed only for the indications for which they are approved or cleared. The FDA may fail to approve or clear indications that are necessary or desirable for successful commercialization. Indeed, the FDA may refuse our requests for 510(k) clearance or premarket approval of new products, or new intended uses or modifications to existing products. Our clearances can be revoked if safety or effectiveness problems develop.

The FDA might require us to obtain a new clearance to label or promote the INVOS System for specific patient subgroups; if we fail to obtain such clearances, our sales and revenues may be adversely affected.

Our INVOS System 510(k) clearance states that the prospective clinical value of the INVOS System has not been demonstrated in patients with specific disease states. If we wish to label or promote more actively the INVOS System for specific types of patients, the FDA may require us to obtain a new 510(k) clearance and would likely carefully scrutinize the data support for any such claim. We cannot assure you that the FDA would grant additional 510(k) clearances in a timely fashion, or at all, or that the FDA would not require us to undertake the more burdensome premarket approval process as a prerequisite for marketing the INVOS System with this type of specific claim. Any of the above could delay our ability to market and sell new products or to promote the INVOS System for specific patient subgroups and would thereby have an adverse effect on our business, financial condition and results of operations.

After clearance or approval of our products, we are subject to continuing regulation by the FDA, and if we fail to comply with FDA regulations, our business could suffer.

Even after clearance or approval of a product, we are subject to continuing regulation by the FDA, including the requirements that our facility be registered and our devices listed with the agency. We are subject to Medical Device Reporting regulations, which require us to report to the FDA if our products may have caused or contributed to a death or serious injury or malfunction in a way that would likely cause or contribute to a death or serious injury if the malfunction were to recur. We must report corrections and removals to the FDA where the correction or removal was initiated to reduce a risk to health posed by the device or to remedy a violation of the Federal Food, Drug, and Cosmetic Act caused by the device that may present a risk to health, and maintain records of other corrections or removals. The FDA closely regulates promotion and advertising, and our promotional and advertising activities could come under scrutiny. If the FDA objects to our promotional and advertising activities or finds that we failed to submit reports under the Medical Device Reporting regulations, for example, the FDA may allege our activities resulted in violations of law.

The FDA and state authorities have broad enforcement powers. Our failure to comply with applicable regulatory requirements could result in enforcement action by the FDA or state agencies, which may include any of the following sanctions:

- untitled letters, warning letters, fines, injunctions, consent decrees and civil penalties;
- repair, replacement, refunds, recall or seizure of our products;
- limitations on exports;
- operating restrictions or partial suspension or total shutdown of production;
- refusing or delaying our requests for 510(k) clearance or premarket approval of new products or new intended uses;
- withdrawing 510(k) clearance or premarket approvals that have already been granted; and
- criminal prosecution.

If any of these events were to occur, they could harm our business.

We have modified some of our products without FDA clearance. The FDA could retroactively determine that the modifications were improper and require us to stop marketing and recall the modified products.

Any modifications to one of our FDA-cleared devices that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, requires a new 510(k) clearance or a premarket approval. We may be required to submit extensive pre-clinical and clinical data depending on the nature

of the changes. We may not be able to obtain additional 510(k) clearances or premarket approvals for modifications to, or additional indications for, our existing products in a timely fashion, or at all. Delays in obtaining future clearances or approvals would adversely affect our ability to introduce new or enhanced products in a timely manner, which in turn would harm our revenue and operating results. We have made modifications to our devices in the past, such as changes to the disposable sensor, and may make additional modifications in the future that we believe do not or will not require additional clearances or approvals. We believe that these changes do not require the submission of a new 510(k) notice. If the FDA disagrees, and requires new clearances or approvals for the modifications, we may be required to recall and to stop marketing the modified devices, to redesign our products or submit new data or information to the FDA. This could harm our operating results.

If we fail to comply with the FDA's Quality System Regulation, our manufacturing operations could be halted, and our business would suffer.

We are currently required to demonstrate and maintain compliance with the FDA's Quality System Regulation, or QSR. The QSR is a complex regulatory scheme that covers the methods and documentation of the design, testing, control, manufacturing, labeling, quality assurance, packaging, storage and shipping of our products. The FDA enforces the QSR through periodic inspections, which may be unannounced. We have been, and anticipate in the future being, subject to such inspections. Our failure to comply with the QSR or to take satisfactory corrective action in response to an adverse QSR inspection could result in enforcement actions, including a public warning letter, a shutdown of or restrictions on our manufacturing operations, delays in approving or clearing a product, refusal to permit the import or export of our products, a recall or seizure of our products, fines, injunctions, civil or criminal penalties, or other sanctions, any of which could cause our business and operating results to suffer.

Failure to obtain or maintain regulatory approval in foreign jurisdictions would prevent us from marketing our products abroad.

We market our products through distributors in foreign markets. In order to market our products in the European Community and many other foreign jurisdictions, we must obtain separate regulatory approvals. We depend on our distributors to obtain and maintain certain of these regulatory approvals. The approval procedure varies among countries and can involve additional requirements and testing, and the time required to obtain approval may differ from that required to obtain FDA clearance. The foreign regulatory approval process may include all of the risks associated with obtaining FDA clearance in addition to other risks. Our distributors might not be able to obtain or maintain foreign approvals on a timely basis or at all. Clearance by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or approval or clearance by the FDA. Failure to obtain or maintain regulatory approval in foreign jurisdictions would prevent us from marketing our products abroad.

Federal regulatory reforms may adversely affect our ability to sell our products profitably.

From time to time, legislation is drafted and introduced in Congress that could significantly change the statutory provisions governing clearance or approval, manufacture and marketing of a device. In addition, FDA regulations and guidance are often revised or reinterpreted by the agency in ways that may significantly affect our business and our products. We cannot predict whether legislative changes will be enacted or FDA regulations, guidance or interpretations changed, and what the impact of such changes, if any, may be.

The lengthy sales cycle for the INVOS System could cause variability in our operating results.

The decision-making process for our INVOS System customers is often complex and time-consuming. We believe the period between initial discussions with a potential customer and a sale of even one unit is approximately six to nine months. The process can be delayed as a result of hospital capital budgeting procedures. In addition, the process could be delayed significantly as a result of the current economic downturn in the United States and abroad. These delays could have an adverse effect on our business, financial condition and results of operations and cause variability in our operating results from quarter to quarter, which could cause fluctuations in the trading price of our common shares.

Sales employee and clinical specialist employee turnover could have an adverse effect on our business and cause variability in our operating results.

As we expand the number of our sales employees and clinical specialist employees, and alter our sales territories, we increase the chance of sales employee turnover. We have incurred and expect to continue to incur significant costs to hire and train new qualified sales employees. In addition, the process of replacing sales employees can lengthen our sales cycle. These delays could have an adverse effect on our business, financial condition and results of operations and could cause variability in our operating results from quarter to quarter, which could adversely affect the price of our common shares.

If we are unable to obtain or maintain intellectual property rights relating to our technology and products, the commercial value of our technology and products will likely be adversely affected and our competitive position could be harmed.

Our success and ability to compete depends in part upon our ability to obtain protection in the United States and other countries for our products by establishing and maintaining intellectual property rights relating to or incorporated into our technology and products. We own or license a variety of patents and patent applications in the United States and corresponding patents and patent applications in certain foreign jurisdictions. Pending and future patent applications owned or licensed by us may not issue as patents or, if issued, may not issue in a form that will be commercially advantageous to us. Even if issued, patents may be challenged, narrowed, invalidated or circumvented, which could limit our ability to stop competitors from marketing similar products or limit the length of term of remaining patent protection we may have for our products. In addition, already issued patents owned or licensed by us may not be valid or enforceable. Further, even if valid and enforceable, these already issued patents may not be sufficiently broad to prevent others from marketing competitive products, despite our patent rights. Changes in either patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection.

For example, one of our significant patents is the subject of a reissue and re-examination proceeding in the U.S. Patent and Trademark Office. Our reissue application was filed for the sole purpose of seeking to broaden certain claims. A competitor has requested re-examination of this patent, and the reissuance and re-examination proceedings have been combined. We cannot predict the outcome of this proceeding, which may result in some or all of the claims being maintained, broadened, narrowed or rejected.

The validity of our patents depends, in part, on whether prior art references disclosed or rendered obvious our inventions as of the filing date of our patent applications. It is possible that all relevant prior art may not have been identified, such as U.S. and foreign patents or published applications or published scientific literature, that could adversely affect the validity of our issued patents or the patentability of our pending patent applications. For example, patent applications in the United States are maintained in confidence for up to 18 months after their filing. In some cases, however, patent applications remain confidential in the U.S. Patent and Trademark Office for the entire time prior to issuance as a U.S. patent. Patent applications filed in countries outside the United States are also not typically published until at least 18 months from their first filing date. Similarly, publication of discoveries in the scientific or patent literature often lags behind actual discoveries.

We may initiate litigation to enforce our patent rights, which may prompt our adversaries in such litigation to challenge the validity, scope or enforceability of our patents. If a court decides that one or more of our patents are not valid, not enforceable or of a limited scope, our rights to stop others from using our inventions may be compromised.

The outcome of litigation to enforce our patent rights is subject to substantial uncertainties, especially in medical device-related patent cases that may, for example, turn on the interpretation of patent claim language by the court which may not be to our advantage, and also the testimony of experts as to technical facts upon which experts may reasonably disagree. Our involvement in such intellectual property litigation could result in significant expense.

We also cannot be certain that we were the first to invent the cerebral oximeter technologies upon which our patents are based or that we were the first to file patent applications based upon those technologies, in those

foreign jurisdictions where patent rights are granted to the first to file as opposed to the first to invent. In the event that a third party has also filed a U.S. patent application covering our cerebral oximeter devices, the sensors used with these devices, or a similar invention, we may have to participate in an adversarial proceeding known as an interference, which is declared by the U.S. Patent and Trademark Office to determine priority of invention in the United States. It is possible that we may be unsuccessful in the interference, resulting in a loss of some or all of our U.S. patent claims. We may also face similar proceedings outside the United States, including oppositions, to determine priority of invention or patentability. Even if we are successful in these proceedings, we may incur substantial costs, and the time and attention of our management and scientific personnel will be diverted in pursuit of these proceedings. Moreover, the laws or enforcement procedures of some foreign jurisdictions may not protect intellectual property rights to the same extent as in the United States, and many companies have encountered significant difficulties in protecting and defending such rights in foreign jurisdictions. If we encounter such difficulties or if we are otherwise precluded from effectively protecting our intellectual property rights in foreign jurisdictions, we may incur substantial costs and our business prospects could be substantially harmed.

We rely on trade secret and copyright protection to protect our interests in proprietary information and know-how, and for processes for which patents are undesirable to obtain or are difficult to obtain or enforce. We may not be able to protect our trade secrets or copyrights adequately. For example, none of our copyrights have been registered with the U.S. Copyright Office, which limits our ability to sue for and collect damages from third party infringers. In addition, we rely on non-disclosure and confidentiality agreements with employees, consultants and other parties to protect, in part, trade secrets and other proprietary technology. These agreements may be breached, and we may not have adequate remedies for any breach. Moreover, others may independently develop equivalent proprietary information, and third parties may otherwise gain access to our trade secrets and proprietary knowledge. Any disclosure of confidential data into the public domain or to third parties could allow our competitors to learn our trade secrets and use the information in competition against us.

If we are found to infringe or are alleged to infringe any third party intellectual property rights, then our business may be adversely affected.

There are numerous U.S. and foreign issued patents and pending patent applications owned by third parties with patent claims in the field of tissue or organic matter oximetry, including cerebral oximetry and areas that are the focus of our product development efforts. We are aware of patents owned by third parties, to which we do not have licenses, that relate to, among other things, optical spectroscopy and the interaction of light with tissue and optical spectroscopy in the area of brain metabolism. For example, possible competitors own patents that are directed to the non-invasive determination of blood oxygen saturation levels with a near infra-red spectrophotometric sensor and to an apparatus for measuring oxygen saturation in blood using two different wavelengths of light. There may be other patents in addition to those of which we are aware that relate to aspects of our technology and that may materially and adversely affect our business. Moreover, because patent applications can take many years to issue as patents, there may be currently pending but unpublished patent applications, unknown to us, which may later result in issued patents that pose a material risk to us.

We may pose a threat to companies that own or control patents relating to cerebral oximetry systems or their components, or to the manufacture and use of such systems, and one or more third parties may file a lawsuit asserting a patent infringement claim against the manufacture, use or sale of the INVOS System based on one or more of these patents. We are not aware of any infringement of the claims of any issued patents by our products, and no charge of patent infringement has been asserted against us. However, potential competitors would have more incentive to assert infringement claims or challenge our patents if a more significant market for the INVOS System develops.

Whether the manufacture, sale or use of the INVOS System, or whether any products under development would, upon commercialization, infringe any patent claim will not be known with certainty unless and until a court interprets the patent claim in the context of litigation. If an infringement allegation is made against us, we may seek to invalidate the asserted patent claim and/or to allege non-infringement of the asserted patent claim. In order for us to invalidate a U.S. patent claim, we would need to rebut the presumption of validity afforded to issued patents in the United States with clear and convincing evidence of invalidity, which is a high burden of proof.

The outcome of infringement litigation is subject to substantial uncertainties, especially in medical device-related patent cases that may, for example, turn on the interpretation of patent claim language by the court which may not be to our advantage, and also the testimony of experts as to technical facts upon which experts may reasonably disagree. Our defense of an infringement litigation lawsuit could result in significant expense. Regardless of the outcome, infringement litigation could significantly disrupt our marketing, development and commercialization efforts, divert our management's attention and quickly consume our financial resources.

In the event that we are found to infringe any valid claim in a patent held by a third party, we may, among other things, be required to:

- pay damages, including up to treble damages and the other party's attorneys' fees, which may be substantial;
- cease the development, manufacture, importation, use and sale of products that infringe the patent rights of others, including our INVOS System and data integration device, through a court-imposed sanction called an injunction;
- expend significant resources to redesign our technology so that it does not infringe others' patent rights, or to develop or acquire non-infringing intellectual property, which may not be possible;
- discontinue manufacturing or other processes incorporating infringing technology; and/or
- obtain licenses to the infringed intellectual property, which may not be available to us on acceptable terms, or which may not be available at all.

Any development or acquisition of non-infringing products or technology or licenses could require the expenditure of substantial time and other resources and could have a materially adverse effect on our business and financial results. If we are required to, but cannot, obtain a license to valid patent rights held by a third party, we would likely be prevented from commercializing the relevant product, or from further manufacture, sale or use of the relevant product. If we need to redesign products or need to develop new methods to avoid third-party patents, we may suffer significant regulatory delays associated with conducting additional studies or submitting technical, manufacturing or other information related to the redesigned product and, ultimately, in obtaining approval.

While our products are in clinical trials, and prior to commercialization, we believe our activities in the United States related to the submission of data to the FDA fall within the scope of the exemptions that cover activities related to developing information for submission to the FDA and fall under general investigational use or similar laws in other countries. However, the U.S. exemptions would not cover the manufacturing, sale or use of products which are no longer in clinical trials, or other activities in the United States that support overseas clinical trials if those activities are not also reasonably related to developing information for submission to the FDA. In any event, the fact that no third party has asserted a patent infringement claim against us to date should not be taken as an indication, or as a level of comfort, that a patent infringement claim will not be asserted against us prior to or upon commercialization.

Some of our agreements, including our distribution and sales representative agreements require us to indemnify the other party in certain circumstances where our products have been found to infringe a patent or other proprietary rights of others. An indemnification claim against us may require us to pay substantial sums to the indemnified party, including its attorneys' fees.

Our success depends on our ability to attract and retain key personnel.

Our future performance depends in significant part on the continued service of our senior management, including Bruce J. Barrett, our President and Chief Executive Officer, and various scientific, technical and manufacturing personnel. Our loss of any of these key personnel could have an adverse effect on us. We do not maintain key-man life insurance on any of our key personnel, and our employment agreement with Mr. Barrett currently expires June 17, 2011. In addition, competition for qualified employees is intense, and if we are unable to attract, retain and motivate additional, highly-skilled employees required for the expansion of our operations, our business, financial condition and results of operations could be adversely affected. We cannot assure you that we will be able to retain our existing personnel or attract additional, qualified persons when required and on acceptable terms.

Any acquisitions that we make could disrupt our business and harm our financial condition.

From time to time, we evaluate potential strategic acquisitions of complementary businesses, products or technologies, as well as consider joint ventures and other collaborative projects. For example, in November 2008, we acquired substantially all of the assets of ICU Data Systems, Inc., a technology development company, for approximately $2,000,000 in cash plus the assumption of specified liabilities. We may not be able to identify appropriate acquisition candidates or strategic partners, or successfully negotiate, finance or integrate any businesses, products or technologies that we acquire. Any acquisition we pursue could diminish our cash otherwise available to us for other uses or be dilutive to our shareholders, and could divert management's time and resources from our core operations.

We have had limited success in marketing the CorRestore System, which could result in claims against us.

Since we acquired rights in the CorRestore System in 2000, we have had limited success in marketing the system. The CorRestore System is an alternative method to existing patches also used for cardiac reconstruction and repair that are significantly less expensive and at least one study indicates are effective. There are also alternative methods of treating congestive heart failure. Surgical Ventricular Restoration, or SVR, is in the early stages of its development and will likely require significant clinical studies before it is widely accepted. There are many larger companies in this industry that have significantly larger research and development budgets than ours. Competitors may be able to develop additional or better treatments for congestive heart failure and may be able to take advantage of the significant time and effort we have invested to gain medical acceptance of SVR surgeries.

We entered into a license agreement with respect to the CorRestore System in 2002. Although we believe we have complied with our obligations under the license agreement, our limited success in marketing the CorRestore System could result in claims against us. If we are required to pay any significant amounts to defend or as a result of any such claims, our results of operations would be adversely affected.

We have broad discretion to determine how to allocate our cash, cash equivalents, marketable securities and investments and may not use them effectively.

As of November 30, 2008, we have approximately $69,996,000 of cash, cash equivalents, marketable securities and long-term investments on hand, which provides us with flexibility in implementing our business plans and responding to future business conditions and opportunities. We have broad discretion to determine how to allocate our cash, cash equivalents, marketable securities and investments. If we fail to apply these funds effectively, the failure could result in financial losses that could have a material adverse effect on our business and cause the price of our common shares to decline. We intend to keep sufficient cash, cash equivalents, marketable securities and investments in cash and bank accounts to avoid becoming an inadvertent investment company subject to regulation under the Investment Company Act of 1940. The remaining cash, cash equivalents, marketable securities and investments are expected to be invested in short-term, U.S. government or other investment grade, interest-bearing investments. These restrictions on our investments might limit the income otherwise available from investing these funds, lowering our income and potentially decreasing our earnings and the price of our common shares.

Risks Relating to Our Common Shares

Provisions of our corporate charter documents and Michigan law may delay or prevent attempts by our shareholders to change our management and hinder efforts to acquire a controlling interest in us.

Our board of directors has the authority, without further approval of our shareholders, to issue preferred shares having such rights, preferences and privileges as the board may determine. Any such issuance of preferred shares could, under some circumstances, have the effect of delaying or preventing a change in control of us and might adversely affect the rights of holders of common shares. In addition, we are subject to Michigan statutes regulating business combinations, takeovers and control share acquisitions, which might also hinder or delay a change in control of our company. Anti-takeover provisions that could be included in the preferred shares when issued and the Michigan statutes regulating business combinations, takeovers and control share acquisitions can

depress the market price of our securities and can limit the shareholders' ability to receive a premium on their shares by discouraging takeover and tender offer bids, even if such events could be viewed as beneficial by our shareholders.

Our directors serve staggered three-year terms, and directors may be removed only for cause by a vote of the holders of a majority of the shares entitled to vote at an election of directors. Our Restated Articles of Incorporation also set the minimum number of directors constituting the entire board at three and the maximum at fifteen, and they require approval of holders of 90 percent of our voting shares to amend these provisions. Our bylaws contain procedures, including notice requirements, for nominating persons for election to our board of directors. These provisions could have an anti-takeover effect by making it more difficult to acquire our company by means of a tender offer, a proxy contest or otherwise or by removing incumbent officers and directors. These provisions could delay, deter or prevent a tender offer or takeover attempt that a shareholder might consider in his or her best interests, including those attempts that might result in a premium over the market price for the common shares held by our shareholders.

The market price of our common shares has been volatile and may continue to remain so.

The market price of our common shares has been volatile. The following could cause the market price of the common shares to continue to fluctuate substantially:

- changes in our quarterly financial condition or operating results;
- changes in general conditions in the economy;
- changes in the financial markets;
- changes in the medical equipment industry;
- changes in financial estimates by securities analysts or differences between those estimates and our actual results;
- the liquidity of the market for the common shares;
- developments with respect to patents and proprietary rights;
- publication of clinical research results regarding our products;
- changes in health care policies in the United States or foreign countries;
- grants or exercises of stock options or warrants;
- news announcements;
- litigation involving us;
- actions by governmental agencies, including the FDA, or changes in regulations; and
- other developments affecting us or our competitors.

In particular, the stock market might experience significant price and volume fluctuations that might affect the market price of the common shares for reasons that are unrelated to our operating performance and that are beyond our control.

We have never paid cash dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have never paid cash dividends on our common shares and do not expect to pay dividends in the foreseeable future. We currently intend to retain any future earnings for use in our business or in our share repurchase program. The payment of any future dividends will be determined by the board in light of the conditions then existing, including our financial condition and requirements, future prospects, restrictions in financing agreements, business conditions and other factors deemed relevant by the board. As a result, capital appreciation, if any, of our common shares will be your sole source of gain for the foreseeable future.

The market price of the common shares might be lower because of shares eligible for future sale and shares reserved for future issuance upon the exercise of options and warrants we have granted.

Future sales of substantial amounts of common shares in the public market or the perception that such sales could occur could adversely affect the market price of the common shares. Any substantial sale of common shares

or even the possibility of such sales occurring may have an adverse effect on the market price of the common shares. As of February 6, 2009, we have outstanding options and warrants to purchase an aggregate of 1,821,187 common shares. We have also reserved up to an additional 358,923 common shares for issuance upon exercises of options or awards of restricted stock or restricted stock units which have not yet been granted or awarded under our stock incentive plans. We have effective registration statements for the shares underlying these options and stock awards. Therefore, except for volume limitations imposed by Securities and Exchange Commission Rule 144 on affiliates, these shares are freely tradable. The market price of our common shares could fall if the holders of these shares sell them or are perceived by the market as intending to sell them.

Forward-Looking Statements

Some of the statements in this report are forward-looking statements. These forward-looking statements include statements relating to our performance in the sections entitled "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business" and elsewhere in this report. Forward-looking statements include statements regarding the intent, belief or current expectations of us or our management, including statements preceded by, followed by or including forward-looking terminology such as "may," "will," "should," "believe," "expect," "anticipate," "plan," "intend," "propose," "estimate," "continue," "predict" or similar expressions, with respect to various matters.

These statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance time frames or achievements to be materially different from any future results, performance, time frames or achievements expressed or implied by the forward-looking statements. We discuss many of these risks, uncertainties and other factors in this report in greater detail in this Item 1A above under the heading "Risk Factors." Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this report. You should read this report and the documents that we have filed as exhibits and incorporated by reference into this report completely and with the understanding that our actual future results may be materially different from what we expect. We hereby qualify all of our forward-looking statements by these cautionary statements.

All forward-looking statements in this report are based on information available to us on the date of this report. We do not undertake to update any forward-looking statements that may be made by us or on our behalf in this report or otherwise.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our headquarters, manufacturing facility and warehouse space are located in a single building in Troy, Michigan. We lease approximately 23,000 square feet, approximately 12,000 square feet of which is office space for sales and marketing, engineering, accounting and other administrative activities. Our lease expires on December 31, 2009. The minimum monthly lease payment will be approximately $12,400 for fiscal 2009, excluding other occupancy costs. We believe that this facility is suitable and adequate for our needs now, except that we are exploring opportunities for new or additional facility space because of the growth of our business.

ITEM 3. LEGAL PROCEEDINGS

We are not a party to any pending legal proceedings.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matter was submitted to a vote of security holders during the fourth quarter of the fiscal year ended November 30, 2008.

SUPPLEMENTAL ITEM. EXECUTIVE OFFICERS OF THE REGISTRANT

Our current executive officers and the positions held by them are as follows:

Name	Executive Officer Since	Age	Position
Bruce J. Barrett	6/94	49	President and Chief Executive Officer
Arik A. Anderson	01/09	42	Senior Vice President, R&D and Operations
William M. Iacona	12/00	38	Vice President and Chief Financial Officer, Controller, and Treasurer
Dominic J. Spadafore	8/02	49	Senior Vice President, U.S. Sales and Marketing
Mary Ann Victor	1/98	51	Vice President and Chief Administrative Officer and Secretary

Our officers serve at the discretion of the board of directors.

Biographical Information

Mr. Bruce J. Barrett has served as our President and Chief Executive Officer and as one of our directors since June 1994. Earlier in his career, Mr. Barrett served as the Director, Hospital Products Division, for Abbott Laboratories, Ltd., a health care equipment manufacturer and distributor, and as the Director, Sales and Marketing, for Abbott Critical Care Systems, a division of Abbott Laboratories, Inc., a health care equipment manufacturer and distributor. While at Abbott Critical Care Systems, Mr. Barrett managed Abbott's invasive oximetry products for approximately four years. Prior to joining Abbott Laboratories, he served as the group product manager of hemodynamic monitoring products of Baxter Edwards Critical Care, an affiliate of Baxter International, Inc., another health care equipment manufacturer and distributor. Mr. Barrett received a B.S. degree in marketing from Indiana State University and an M.B.A. degree from Arizona State University. Mr. Barrett is a party to an employment agreement with us that requires us to elect him to the offices he currently holds.

Mr. Arik A. Anderson has served as our Senior Vice President, R&D and Operations since January 2009. From October 2007 until January 2009, he served as our Senior Vice President, Research and Development. From July 2005 until joining Somanetics, Mr. Anderson served as Director of Product Development for Delphi Medical Systems, a provider of technology and products to the infusion, respiratory care, vital signs monitoring and power mobility medical device markets. He was in charge of a team of 45 engineers in the US, Mexico, and India who supported existing products and developed next generation products. From April 2004 until July 2005, Mr. Anderson was the President and Chief Executive Officer of Tasso Solutions, a product development and manufacturing consulting firm specializing in helping companies outsource design and manufacturing work. From December 2002 until April 2004, Mr. Anderson was the Vice President of Engineering Services for TriVirix International, a design and manufacturing services company focused specifically on the medical device industry, serving customers such as Johnson & Johnson and Medtronic. In this capacity, Mr. Anderson was in charge of 50 engineers for TriVirix in the U.S. and Europe. Mr. Anderson received a Bachelor of Science degree in Electrical and Computer Engineering from the University of Wisconsin – Madison.

Mr. William M. Iacona has served as our Vice President and Chief Financial Officer since January 2006, as our Treasurer since February 2000 and as our Controller since April 1997. From December 2000 until January 2006, he served as our Vice President, Finance. Before joining us, he was in the Finance Department of Ameritech Advertising Services, a telephone directory company and a division of Ameritech Corporation (now AT&T), and was on the audit staff of Deloitte & Touche LLP, independent auditors. He is a certified public accountant and received a B.S. degree in accounting from the University of Detroit.

Mr. Dominic J. Spadafore has served as our Senior Vice President, U.S. Sales and Marketing, since December 2007. From August 2002 until December 2007, he served as our Vice President, U.S. Sales and Marketing. Mr. Spadafore previously served, from July 2000 until July 2002, as National Sales and Clinical Director of the Cardiac Assist Division of Datascope Corporation, a medical device company that manufactures and markets healthcare products including medical devices used in high-risk cardiac patients. In this position, Mr. Spadafore supervised approximately 50 sales and clinical personnel and approximately $80 million in domestic

revenues. From July 1997 until July 2000, he served as Western Area Manager of the Patient Monitoring Division of Datascope Corporation, and prior to that he held field sales representative and regional manager positions with progressive responsibilities with Datascope Corporation. Earlier in his career Mr. Spadafore was a sales representative with the Upjohn Company, a pharmaceutical manufacturer, and a sales representative with White and White Incorporated, a medical supply distributor. He received a BA degree in pre-medicine from Oakland University. Mr. Spadafore is a party to an employment agreement with us that requires us to elect him to the office he currently holds.

Ms. Mary Ann Victor has served as our Vice President and Chief Administrative Officer since January 2006 and as our Secretary since January 1998. From January 1998 until January 2006, she served as our Vice President, Communications and Administration. Prior to that she was our Director, Communications and Administration. Her prior experience includes various investor relations and public relations positions with publicly-held companies. She also is an attorney and practiced with the law firm Varnum Riddering Schmidt & Howlett. Ms. Victor received a B.S. in political science from the University of Michigan and a J.D. from the University of Detroit.

PART II

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

Our common shares trade on The NASDAQ Global Market under the trading symbol "SMTS." The following table sets forth, for the periods indicated, the range of high and low sales prices of our common shares as reported by NASDAQ.

	High	Low
Fiscal Year Ended November 30, 2007		
First Quarter	$23.63	$18.35
Second Quarter	21.10	17.35
Third Quarter	19.81	16.08
Fourth Quarter	20.59	17.93
Fiscal Year Ended November 30, 2008		
First Quarter	$29.53	$19.45
Second Quarter	28.00	10.01
Third Quarter	26.17	16.76
Fourth Quarter	25.21	14.11

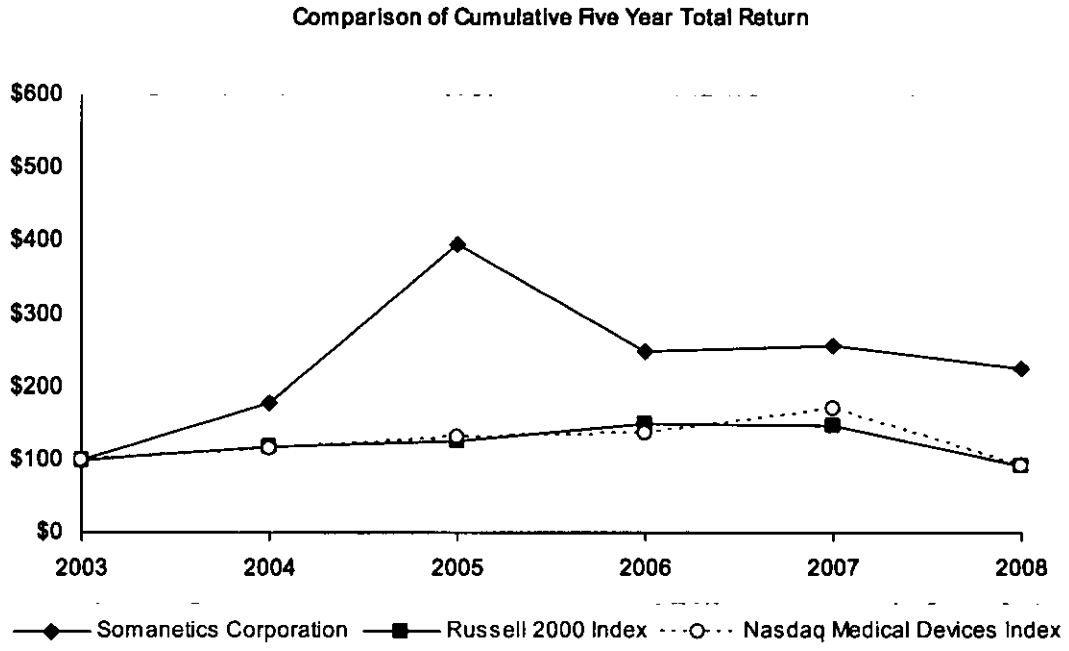
As of February 6, 2009, we had 506 shareholders of record of our common shares.

We have never paid cash dividends on our common shares and do not expect to pay such dividends in the foreseeable future. We currently intend to retain any future earnings for use in our business or in our share repurchase program. The payment of any future dividends will be determined by the board in light of the conditions then existing, including our financial condition and requirements, future prospects, restrictions in any financing agreements, business conditions and other factors deemed relevant by the board.

Performance Graph

The following line graph compares for the fiscal years ended November 30, 2004, 2005, 2006, 2007 and 2008 (1) the yearly percentage change in our cumulative total shareholder return (*i.e.*, the change in share price divided by the initial share price, expressed as the resulting value of a $100 investment; we have not paid cash dividends) on our common shares, with (2) the cumulative total return of The Russell 2000 Index and with (3) the cumulative total return on the NASDAQ Medical Devices Index.

COMPARISON OF CUMULATIVE TOTAL RETURN*
AMONG SOMANETICS CORPORATION,
THE RUSSELL 2000 INDEX, AND
NASDAQ MEDICAL DEVICES INDEX**



	2003	2004	2005	2006	2007	2008
Somanetics Corporation	100.00	177.49	395.27	248.08	255.88	224.30
The Russell 2000 Index	100.00	117.26	126.81	148.91	147.16	92.04
NASDAQ Medical Devices Index	100.00	115.59	130.88	135.62	171.17	91.01

Assumes $100 invested on November 30, 2003 in Somanetics Corporation common shares, The Russell 2000 Index and the NASDAQ Medical Devices Index.

*Total return assumes reinvestment of dividends.
**Fiscal Year ending November 30.

Unregistered Sales of Equity Securities and Use of Proceeds

The following table provides information with respect to any purchase made by or on behalf of us or any affiliated purchaser of our common shares for each month during the fourth quarter ended November 30, 2008:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs
September 1-30, 2008	--	--	--	13,550,580
October 1-31, 2008....	--	--	--	13,550,580
November 1-30, 2008	--	--	--	13,550,580
Total.....	0	N/A	0	

On April 3, 2008, we publicly announced that our Board of Directors authorized the repurchase of up to $15 million of our common shares. Purchases may be made from time to time in the open market or in privately negotiated transactions. The prices, timing and amount of, and purposes for, any purchases will be determined by management. On May 9, 2008, we publicly announced that our Board of Directors approved an increase in the limit on the share repurchase program and authorized the repurchase of up to an additional $15 million of our common shares, and on July 1, 2008, we publicly announced that our Board of Directors approved an increase in the limit on the share repurchase program and authorized the repurchase of up to an additional $15 million of our common shares, for a total of $45 million of our common shares under the repurchase program. During the fiscal year 2008, we repurchased 1,805,129 common shares at an average price of $17.42 per share and an aggregate cost of $31,449,420. All of the shares were purchased by us in open-market transactions pursuant to this publicly-announced share repurchase program. The program does not have an expiration date, except upon purchase of the maximum authorized dollar amount of our common shares.

ITEM 6. SELECTED FINANCIAL DATA

You should read the following selected financial data together with our financial statements and related notes included in Item 8 of this report and with "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 7 of this report. We have derived the statement of operations data for the years ended November 30, 2008, 2007 and 2006 and the balance sheet data as of November 30, 2008 and 2007 from our audited financial statements, which are included in Item 8 of this report. We have derived the statement of operations data for the years ended November 30, 2005 and 2004 and the balance sheet data as of November 30, 2006, 2005 and 2004 from our audited financial statements, which are not included in this report. Our historical results for any prior period are not necessarily indicative of results to be expected for any future period.

	Year Ended November 30,				
	2008 (4)	2007	2006	2005	2004
Statement of Operations Data:	(in thousands, except per share data)				
Net revenues	$ 47,455	$ 38,586	$ 28,701	$ 20,509	$ 12,609
Cost of sales	6,249	4,726	3,566	2,601	2,050
Gross margin	41,206	33,860	25,135	17,908	10,558
Operating expenses:					
Research, development and engineering (1)	1,259	669	1,582	526	369
Selling, general and administrative (2)	26,166	22,269	16,485	13,241	8,237
Total operating expenses	27,425	22,938	18,067	13,767	8,606
Operating income	13,781	10,922	7,068	4,141	1,952
Other income:					
Interest income	2,630	4,008	2,582	310	55
Total other income	2,630	4,008	2,582	310	55
Income before income taxes	$ 16,411	$ 14,930	$ 9,650	$ 4,451	$ 2,007
Income tax (expense) benefit (3)	(5,965)	(5,248)	750	3,300	6,700
Net income	$ 10,446	$ 9,682	$ 10,400	$ 7,751	$ 8,707
Net income per common share – basic	$ .82	$ .73	$ .83	$ .75	$ .89
Net income per common share – diluted	$ .76	$ .67	$ .75	$ .66	$ .77
Weighted average number of common shares outstanding – basic	12,671	13,213	12,463	10,322	9,780
Weighted average number of common shares outstanding – diluted	13,672	14,384	13,824	11,798	11,323

	As of November 30,				
	2008 (4)	2007	2006	2005	2004
Balance Sheet Data:	(in thousands)				
Cash, cash equivalents, securities and investments	$ 69,996	$ 85,804	$ 71,571	$ 13,148	$ 7,070
Working capital	65,640	62,998	57,968	18,044	9,311
Total assets	87,968	104,984	92,423	29,719	18,785
Total liabilities	3,120	2,819	2,205	1,878	1,232
Accumulated deficit	(6,603)	(17,049)	(26,731)	(37,131)	(44,882)
Total shareholders' equity	84,848	102,165	90,218	27,841	17,553

(1) Includes a $1,000,000 expense in fiscal 2006 in connection with our Contract Development and Exclusive Licensing Agreement we entered into with NeuroPhysics Corporation.

(2) Includes an impairment expense of $929,093 in fiscal 2005 in connection with the write-off of an intangible asset.

(3) Fiscal 2006, 2005, and 2004 amounts are net of a fourth quarter reversal of a portion of our income tax valuation allowance in the amount of $4,068,613, $4,837,420 and $7,397,345, respectively.

(4) Fiscal 2008 amounts reflect 1) our acquisition of substantially all of the assets of ICU Data Systems, Inc. in November 2008, and 2) our common share repurchase program. See Notes 2 and 8 of Notes to Financial Statements in Item 8.

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

Forward-Looking Statements

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and the related notes and other financial data included elsewhere in this report. Some of the information contained in this discussion and analysis or set forth elsewhere in this report, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should review the "Risk Factors" section of this report for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis. See also "Forward-Looking Statements" in Item 1A of this report.

Overview

We develop, manufacture and market the INVOS System, a non-invasive patient monitoring system that continuously measures changes in the blood oxygen levels in the brain and elsewhere in the body in tissues beneath the sensor in patients with or at risk for restricted blood flow.

We began commercializing our model 5100 INVOS System internationally in the third quarter of fiscal 1999 and in the United States in the fourth quarter of fiscal 2000. Unlike earlier models, the model 5100 has the added capability of being able to monitor pediatric patients. From product launch until the first quarter of fiscal 2005, we focused our marketing efforts primarily on adult and pediatric cardiac surgeries and carotid artery surgeries. During the second quarter of fiscal 2004, results of both the first prospective, randomized clinical trial and a larger retrospective review evaluating the INVOS System were presented, which we believe have contributed to the INVOS System gaining further market penetration.

In the first quarter of fiscal 2005, we initiated selling and marketing efforts for the INVOS System in the pediatric intensive care unit, or ICU. We are currently expanding the use of our INVOS System in the pediatric and neonatal ICU's with the launch of our smaller sensor in the first half of fiscal 2008.

In November 2005, we received 510(k) clearance from the FDA to market our INVOS System to monitor changes in somatic tissue blood oxygen saturation in regions of the body other than the brain in patients with or at risk for restricted blood flow. In May 2008, we received 510(k) clearance from the FDA to market our INVOS System to monitor changes in blood oxygen saturation in any tissues beneath the sensor, not limited to brain and somatic tissue, in any individual. Our four-channel cerebral and somatic INVOS System monitor, which we launched in the second quarter of 2006, can display information from four disposable sensors. This feature allows for the simultaneous monitoring of changes in blood oxygen saturation in tissues beneath the sensor in four different places in the body in patients with or at risk for restricted blood flow, in somatic tissue.

In November 2008, we acquired substantially all of the assets of ICU Data Systems, Inc., a technology development company, for approximately $2,000,000 in cash plus the assumption of specified liabilities. ICU Data Systems has developed a patented technology that integrates data from a broad array of hospital bedside devices, such as physiological monitors, ventilators and infusion devices, into a single bedside display for comparison, data management and storage. We plan to further develop and launch our newly-acquired data integration technology as a stand-alone device in mid-2009. The INVOS System is one of many devices whose data can be integrated into the stand-alone device. To support the addition of the derived parameter features to the system, we will pursue a new FDA 510(k) clearance in 2009. In addition, we expect to invest to combine the ICU Data Systems and INVOS System technologies in a single product for launch expected in the second half of 2010. We also plan to pursue a new FDA 510(k) clearance for this integrated device in 2010.

Net Revenues and Cost of Sales

We derive our revenues primarily from sales of INVOS Systems to hospitals in the United States through our direct sales team and independent sales representative firms, although we expect to derive modest revenues in fiscal 2009 from our newly-acquired data integration technology, which we plan to launch as a stand-alone device in mid-2009 through our direct sales team. Outside the United States, we have distribution agreements with independent distributors for the INVOS System, including Covidien, formerly Tyco Healthcare, in Europe, Canada, the Middle East and South Africa, and Edwards Lifesciences Ltd. in Japan. Our cost of sales represent the cost of producing monitors and disposable sensors. Revenues from outside the United States contributed 20 percent to our fiscal 2008 net revenues. As a percentage of net revenues, the gross margins from our international sales are typically lower than gross margins from our U.S. sales, reflecting the difference between the prices we receive from distributors and from direct customers.

We recognize revenue when there is persuasive evidence of an arrangement with the customer, the product has been delivered, the sales price is fixed or determinable, and collectibility is reasonably assured. The product is considered delivered to the customer once we have shipped it, as this is when title and risk of loss have transferred. Payment terms are generally net 30 days for U.S. sales and net 60 days or longer for international sales.

Our INVOS System revenues are derived from the sale of monitors and our disposable sensors. We intend that disposable sensors will form the basis of a recurring revenue stream. In addition, we offer to our customers in the United States a no capital cost sales program whereby we ship the INVOS System monitor to the customer at no charge. Under this program, we do not recognize any revenue upon the shipment of the monitor. At the time of shipment of the monitor, we capitalize the monitor as an asset and depreciate this asset over five years, and this depreciation is included in cost of goods sold. We recognize sensor revenue when we receive purchase orders and ship the product to the customer.

Operating Expenses

Selling, general and administrative expenses generally consist of:

- salaries, wages and related expenses of our employees and consultants;
- sales and marketing expenses, such as employee sales commissions, commissions to independent sales representatives, travel, entertainment, advertising, education and training expenses, depreciation of demonstration monitors and attendance at selected medical conferences;
- clinical research expenses, such as costs of supporting clinical trials; and
- general and administrative expenses, such as the cost of corporate operations, professional services, stock compensation, insurance, warranty and royalty expenses, investor relations, depreciation and amortization, facilities expenses and other general operating expenses.

We have increased the size of our direct sales team from 44 persons at the end of fiscal 2006 to 55 persons at the end of fiscal 2008. We expect to increase the size of our U.S. direct sales team in fiscal 2009 and are planning to hire direct salespersons and clinical specialists in Europe to support Covidien. We also expect increased sales and marketing expenses and increased stock compensation expenses in fiscal 2009. As a result, we expect selling, general and administrative expenses to increase in fiscal 2009.

Research, development and engineering expenses consist of:

- salaries, wages and related expenses of our research and development personnel and consultants;
- costs of various development projects; and
- costs of preparing and processing applications for FDA clearance of new products.

For the fiscal year ended November 30, 2006, we recorded a research and development expense of $1,000,000 in connection with our former contract development and exclusive licensing agreement with NeuroPhysics Corporation.

We expect our research and development expenses to increase in fiscal 2009 as a result of development costs associated with our newly-acquired data integration technology, development costs associated with our Contract Development Agreement with Shirley Research Corporation and the addition of research and development personnel.

Deferred Tax Assets and Impairment Charges

For the fiscal year ended November 30, 2006, we adjusted our deferred tax asset valuation allowance resulting in the recognition of additional deferred tax assets due to expected future tax benefits related to our net operating loss carryforwards. Recognition of this additional deferred tax asset resulted in a non-cash net tax benefit on our statement of operations for fiscal 2006 of $750,000.

For the fiscal year ended November 30, 2007, we recognized income tax expense at an estimated effective tax rate of 35 percent on our statement of operations. This income tax expense included a non-cash tax expense on our statement of operations for fiscal 2007 of $5,076,276. In November 2007, we wrote off obsolete inventory of $180,521.

For the fiscal year ended November 30, 2008, we recognized income tax expense at an estimated effective tax rate of 36 percent on our statement of operations. This income tax expense included a non-cash tax expense on our statement of operations for fiscal 2008 of $5,586,906. In addition, during fiscal 2008 we recognized deferred tax assets related to the exercise of stock options of approximately $1,012,000. These assets were recognized in additional paid in capital on our balance sheet because they were utilized and reduced current taxes payable.

Results of Operations

Fiscal Year Ended November 30, 2008 Compared to Fiscal Year Ended November 30, 2007

Net Revenues. Our net revenues increased $8,869,785, or 23 percent, from $38,585,832 in the fiscal year ended November 30, 2007 to $47,455,617 in the fiscal year ended November 30, 2008. The increase in net revenues is primarily attributable to:

- an increase in U.S. sales of $6,474,215, or 21 percent, from $31,560,930 in fiscal 2007 to $38,035,145 in fiscal 2008. The increase in U.S. sales was primarily due to an increase in sales of the disposable sensor of $5,619,820, or 23 percent, primarily as a result of a 16 percent increase in sensor unit sales. In addition, sales of the INVOS System monitor in the United States increased $932,969, or 14 percent, primarily as a result of increased purchases by pediatric hospitals; and
- an increase in international sales of $2,395,570, or 34 percent, from $7,024,902 in fiscal 2007 to $9,420,472 in fiscal 2008. The increase in international sales was primarily due to increased purchases of our INVOS System monitor and disposable sensors of $1,655,456 by Covidien in Europe, and $686,471 by Edwards Lifesciences in Japan. In fiscal 2008, international sales represented 20 percent of our net revenues, compared to 18 percent of our net revenues in fiscal 2007. Purchases by Covidien accounted for 14 percent of net revenues in fiscal 2008, compared to 13 percent in fiscal 2007.

In the United States, we sold 288,797 disposable sensors in fiscal 2008, and internationally, we sold 135,850. We placed 517 INVOS System monitors in the United States and 621 internationally in fiscal 2008, and our installed base of INVOS System monitors in the United States was 2,523, in 714 hospitals, as of November 30, 2008.

Sales of our products as a percentage of net revenues were as follows:

Product	Fiscal Year Ended November 30, 2008	2007
Sensors	72%	73%
INVOS System Monitors	28%	27%
Total	100%	100%

We believe that the current economic downturn in the United States and abroad could significantly lengthen the sales cycle for our products and reduce the growth in our net revenues in fiscal 2009.

Gross Margin. Gross margin as a percentage of net revenues was 87 percent for the fiscal year ended November 30, 2008 and 88 percent for the fiscal year ended November 30, 2007. The decrease in our gross margin percentage is primarily attributable to increased international sales, due to lower margins we receive on sales to our international distributors. This decrease was partially offset by a six percent increase in the average selling price of disposable sensors in the United States, which is attributable to increased sales of our pediatric sensors, which sell for a higher price than the adult sensor.

Research, Development and Engineering Expenses. Our research, development and engineering expenses increased $590,412, or 88 percent, from $668,815 in fiscal 2007 to $1,259,227 in fiscal 2008. The increase is primarily attributable to an increase in salaries of $279,487 due to the addition of research and development personnel in fiscal 2007 and 2008, and increased costs associated with advances to the design and performance features of our INVOS System monitor and disposable sensors of $214,803. We expect our research, development and engineering expenses to increase in fiscal 2009 primarily as a result of development costs associated with development of our newly-acquired data integration technology as a stand-alone device, development of a single product combining the data integration technology with our INVOS System technology, development costs associated with advances to the design and performance features of the INVOS System, including the disposable sensor, development costs associated with our Contract Development Agreement with Shirley Research Corporation and the hiring of additional research and development personnel.

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased $3,896,936, or 17 percent, from $22,269,184 for the fiscal year ended November 30, 2007 to $26,166,120 for the fiscal year ended November 30, 2008, primarily due to:

- a $2,275,304 increase in salaries, wages, commissions and related expenses, primarily as a result of an increase in the number of employees, principally in sales and marketing (from an average of 88 employees for the fiscal year ended November 30, 2007 to an average of 105 employees for the fiscal year ended November 30, 2008) and an increase in salaries of existing employees;
- an $673,212 increase in travel, marketing and selling-related expenses as a result of our increased sales personnel and increased sales and marketing activities, including sales training and trade shows;
- a $557,282 increase in stock compensation expense due to stock compensation issued to our officers, employees, directors and one of our consultants in fiscal 2006, 2007 and 2008;
- a $465,769 increase in professional service fees, primarily due to increased legal, auditing and tax fees;
- a $217,099 increase in accrued incentive compensation expense due to our fiscal year 2008 financial performance, primarily increased sales and operating income in accordance with the 2008 incentive compensation plans; and
- a $173,672 increase in office and facility expenses primarily as a result of increased employees.

These increases were partially offset by a $273,905 decrease in commissions paid to our independent sales representative firms as a result of fewer independent sales representative firms in fiscal 2008, and a $182,919 decrease in clinical research expense primarily as a result of a grant made in fiscal 2007 for the support of neonatal research.

We expect our selling, general and administrative expenses to increase in fiscal 2009, primarily as a result of our hiring additional direct sales personnel in fiscal 2008 and 2009, increased employee sales commissions payable as a result of increased sales, increased sales and marketing expenses and increased stock compensation expenses.

Other Income. During fiscal 2008, interest income decreased to $2,629,967, from $4,008,537 in fiscal 2007, primarily due to decreased interest rates, decreased investment balances, and the use of cash for the repurchase of common shares, partially offset by our increased cash and cash equivalents balances as a result of cash provided by operating activities and maturities and redemptions of investments.

Income Taxes. As of November 30, 2008, we recognized income tax expense at an estimated effective tax rate of 36 percent on our statement of operations. In addition, during fiscal 2008 we recognized deferred tax assets related to the exercise of stock options of approximately $1,012,000. These assets were recognized in additional paid in capital on our balance sheet because they were utilized and reduced current taxes payable. As of November 30, 2007, we recognized income tax expense at an estimated effective tax rate of 35 percent on our statement of operations.

Fiscal Year Ended November 30, 2007 Compared to Fiscal Year Ended November 30, 2006

Net Revenues. Our net revenues increased $9,885,232, or 34 percent, from $28,700,600 in the fiscal year ended November 30, 2006 to $38,585,832 in the fiscal year ended November 30, 2007. The increase in net revenues is primarily attributable to:

- an increase in U.S. sales of $8,284,866, or 36 percent, from $23,276,064 in fiscal 2006 to $31,560,930 in fiscal 2007. The increase in U.S. sales was primarily due to an increase in sales of the disposable sensor of $5,691,400, or 30 percent, primarily as a result of a 24 percent increase in sensor unit sales. In addition, sales of the INVOS System monitor in the United States increased $2,841,360, or 75 percent, primarily as a result of increased purchases by pediatric hospitals; and
- an increase in international sales of $1,600,366, or 30 percent, from $5,424,536 in fiscal 2006 to $7,024,902 in fiscal 2007. The increase in international sales was primarily due to increased purchases of the INVOS System monitor and disposable sensors by Covidien, formerly Tyco Healthcare, in Europe, and increased purchases by Edwards Lifesciences in connection with the launch of our four-channel cerebral and somatic INVOS System monitor in Japan, partially for evaluation and demonstration purposes. In fiscal 2007, international sales represented 18 percent of our net revenues, compared to 19 percent of our net revenues in fiscal 2006. Purchases by Covidien accounted for 13 percent of net revenues in fiscal 2007, compared to 15 percent in fiscal 2006.

In the United States, we sold 248,360 sensors in fiscal 2007, and internationally, we sold 122,690. We placed 509 INVOS System monitors in the United States and 434 internationally in fiscal 2007, and our installed base of INVOS System monitors in the United States was 2,006, in 664 hospitals, as of November 30, 2007.

Sales of our products as a percentage of net revenues were as follows:

	Fiscal Year Ended November 30,	
Product	**2007**	**2006**
Sensors	73%	75%
INVOS System Monitors	27%	24%
Total INVOS System	100%	99%
Other	0%	1%
Total	100%	100%

Gross Margin. Gross margin as a percentage of net revenues was 88 percent for the fiscal year ended November 30, 2007 and November 30, 2006. We realized a four percent increase in the average selling price of disposable sensors in the United States and increased sales of the INVOS System monitors to pediatric hospitals in

the United States. The increase in our average selling prices in the United States is attributable to increased sales of our pediatric sensor, which sells for a higher price than the adult sensor.

Research, Development and Engineering Expenses. Our research, development and engineering expenses decreased $913,706, or 58 percent, from $1,582,521 in fiscal 2006 to $668,815 in fiscal 2007. The decrease is primarily attributable to a $1,000,000 initial fee under our Contract Development and Exclusive Licensing Agreement entered into with NeuroPhysics Corporation in the fourth quarter of fiscal 2006.

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased $5,784,617, or 35 percent, from $16,484,567 for the fiscal year ended November 30, 2006 to $22,269,184 for the fiscal year ended November 30, 2007, primarily due to:

- a $2,575,653 increase in salaries, wages and related expenses, primarily as a result of an increase in the number of employees, principally in sales and marketing (from an average of 64 employees for the fiscal year ended November 30, 2006 to an average of 88 employees for the fiscal year ended November 30, 2007) and an increase in salaries of existing employees;
- an $1,200,884 increase in travel, marketing and selling-related expenses as a result of our increased sales personnel and increased sales and marketing activities, including sales training, product sponsorship, trade shows and advertising;
- an $1,147,564 increase in employee sales commissions as a result of increased sales and hiring additional sales employees in fiscal 2007;
- a $513,754 increase in accrued incentive compensation expense due to our fiscal year 2007 financial performance, primarily increased sales and operating income in accordance with the 2007 incentive compensation plans;
- a $477,060 increase in stock compensation expense due to stock compensation issued to directors, officers, employees and a consultant in fiscal 2006 and 2007;
- a $233,693 increase in clinical research expenses primarily as a result of a grant for neonatal research and a clinical trial evaluating the use of the INVOS System on diabetic patients over age 50; and
- a $165,935 increase in corporate insurance expenses due to increased coverage limits and increased premiums.

These increases were partially offset by a $739,400 decrease in commissions paid to our independent sales representative firms as a result of fewer independent sales representative firms in fiscal 2007.

Other Income. During fiscal 2007, interest income increased to $4,008,537, from $2,582,033 in fiscal 2006, primarily due to our increased cash, cash equivalents, marketable securities and long-term investment balances as a result of cash provided by operating activities and the proceeds from our public offering of common shares that closed in the second quarter of fiscal 2006, and increased interest rates.

Income Taxes. As of November 30, 2007, we recognized income tax expense at an estimated effective tax rate of 35 percent on our statement of operations, and we expect this to continue for future periods. As of November 30, 2006, we further adjusted our deferred tax asset valuation allowance resulting in the recognition of additional deferred tax assets as a result of expected future tax benefits related to our net operating loss carryforwards. Recognition of this additional deferred tax asset resulted in a non-cash tax benefit on our statement of operations for fiscal 2006 of $750,000, and increased our net income for fiscal 2006 to $10,399,957, or $0.75 per diluted common share. For fiscal 2006, the reversal of our valuation allowance was net of recorded taxes. The net income tax benefit of $750,000 consisted of income tax expense recorded at an estimated effective tax rate of 34 percent in the amount of $2,604,663 for the first three quarters of fiscal 2006, and a net deferred tax benefit of $3,354,663 recorded in the fourth quarter of fiscal 2006.

Effects of Inflation

We do not believe that inflation has had a significant impact on our financial position or results of operations in the past three years.

Liquidity and Capital Resources

General

Our principal sources of operating funds have been the proceeds from sales of our common shares and cash provided by operating activities. See Statements of Shareholders' Equity of our financial statements included elsewhere in this report.

As of November 30, 2008, we did not have any outstanding or available debt financing arrangements, we had working capital of $65.6 million and our primary sources of liquidity were $37.2 million of cash and cash equivalents, $20.0 million of marketable securities and $12.8 million of long-term investments. Marketable securities and long-term investments consist of Aaa-rated United States Government agency bonds and treasury bills, and cash and cash equivalents are currently invested in bank savings accounts and money market accounts, pending their ultimate use.

On March 6, 2006, we completed a public offering of 2,300,000 of our newly-issued common shares at a public offering price of $24.00 per share. The net proceeds, after deducting the underwriting discount and the expense of the offering, were $51,232,774.

In April 2008, our Board of Directors authorized the repurchase of up to $15 million of our common shares. Purchases may be made from time to time in the open market or in privately negotiated transactions. The prices, timing and amount of, and purposes for, any purchases will be determined by management. In May 2008, our Board of Directors authorized the repurchase of up to an additional $15 million of our common shares, and in July 2008, our Board of Directors authorized the repurchase of up to an additional $15 million of our common shares, for a total of $45 million of our common shares under the repurchase program. During fiscal 2008, we repurchased 1,805,129 common shares at an average price of $17.42 per share and an aggregate cost of $31,449,420, leaving $13,550,580 in dollar value of shares that may yet be purchased under the repurchase program.

In November 2008, we acquired substantially all of the assets of ICU Data Systems, Inc., a technology development company, for approximately $2,000,000 in cash plus the assumption of specified liabilities. ICU Data Systems has developed a patented technology that integrates data from a broad array of hospital bedside devices, such as physiological monitors, ventilators and infusion devices, into a single bedside display for comparison, data management and storage. We plan to further develop and launch our newly-acquired data integration technology as a stand-alone device in mid-2009. To support the addition of the derived parameter features to the system, we will pursue a new FDA 510(k) clearance in 2009. In addition, we expect to invest to combine the ICU Data Systems and INVOS System technologies in a single product for launch expected in the second half of 2010. We also plan to pursue a new FDA 510(k) clearance for this integrated device in 2010. We expect our research, development and engineering expenses to increase in fiscal 2009 as a result of development costs associated with development of our newly-acquired data integration technology as a stand-alone device and development of a single product combining the data integration technology with our INVOS System technology.

We entered into a Contract Development and Exclusive Licensing Agreement with NeuroPhysics Corporation as of September 18, 2006. The agreement provided us with feasibility research, contract development and consulting services and certain ownership and licensing rights, subject to the rights of the United States Federal government, to intellectual property and technical knowledge associated with several novel near-infrared spectroscopy, or "NIRS", and imaging technologies and products under development at NeuroPhysics. We paid an initial license fee of $1,000,000. We terminated this agreement in February 2009, except for various provisions regarding our ownership of the technology related to the potential new products. In February 2009, we entered into a similar agreement with Shirley Research Corporation and Hugh F. Stoddart and Hugh A. Stoddart, and have agreed to pay monthly development and consulting fees of $15,000 a month during the term of the agreement and a royalty on future sales of the new products.

We believe that cash, cash equivalents, marketable securities and long-term investments on hand at November 30, 2008 will be adequate to satisfy our operating and capital requirements for more than the next twelve months.

Cash Flows From Operating Activities

Net cash provided by operations during fiscal 2008, 2007 and 2006 was $15,874,473, $13,081,989 and $7,304,835, respectively. In fiscal 2008, cash was provided primarily by:

- $17,311,324 of income before income taxes and non-cash depreciation, amortization, stock compensation expense and excess tax benefits from stock option exercises;
- a $534,450 decrease in accrued interest income, primarily due to our decreased marketable securities and long-term investment balances primarily due to the use of cash from maturing investments for the repurchase of common shares and decreased interest rates;
- a $153,055 increase in accounts payable, primarily as a result of increased inventory and operating expenses, partially offset by more timely payments made to vendors; and
- a $147,191 increase in accrued liabilities, primarily as a result of an increase in accrued state, local and property taxes and accrued sales commissions as a result of our fiscal 2008 financial performance.

Cash provided by operations in fiscal 2008 was partially offset by:

- a $1,606,952 increase in inventories, primarily due to the acquisition of components associated with our disposable sensors and our INVOS System monitor due to anticipated sales; inventories on our balance sheet increased less because we capitalized INVOS System monitors to property and equipment that are being used as demonstration units and no capital cost sales equipment, as described below;
- a $375,532 increase in accounts receivable, primarily as a result of higher fourth quarter sales in fiscal 2008 than in the fourth quarter of fiscal 2007, partially offset by the timing of more of the sales in the fourth quarter of fiscal 2007 towards the end of the quarter; and
- a $252,488 increase in deferred income tax benefits as a result of payments made for estimated alternative minimum tax that we expect will result in future tax credits when we use our net operating loss carryforwards.

We expect our working capital requirements to increase as sales increase.

The increase in inventories described above is greater than shown on our balance sheet because it includes INVOS System monitors that we capitalized because they are being used as demonstration units and no capital cost sales equipment. We capitalized $644,814 of costs from inventory for INVOS System monitors being used as demonstration units and no capital cost sales equipment at customers during fiscal 2008, compared to $833,069 in fiscal 2007. As of November 30, 2008, we have capitalized $3,919,296 in costs for INVOS System monitors being used as demonstration and no capital cost sales equipment, and these assets have a net book value of $1,820,503. We depreciate these assets over five years.

We believe that the current economic downturn in the United States and abroad could significantly lengthen our collection cycle for our accounts receivable and, as a result, increase our accounts receivable balances.

Cash Flows From Investing Activities

Net cash provided by investing activities in fiscal 2008 was $17,220,458 and net cash used in investing activities in fiscal 2007 and 2006 was $10,127,748 and $43,390,890, respectively. In fiscal 2008, cash was provided by maturities and redemptions of marketable securities and long-term investments of $54,822,160. This cash provided by investing activities was partially offset by investments in marketable securities and long-term investments of $35,021,241, our acquisition of ICU Data Systems, Inc. in fiscal 2008 for a net investment of $1,926,031, and also $654,430 in capital expenditures, primarily tooling for our new smaller sensor launched in 2008, a new trade show booth and manufacturing quality control computer software.

Cash Flows From Financing Activities

Net cash used in financing activities in fiscal 2008 was $29,101,767 and net cash provided by financing activities in fiscal 2007 and 2006 was $1,483,867 and $51,672,687, respectively. During fiscal 2008, we

repurchased 1,805,129 common shares for a total of $31,449,420. This cash used in financing activities was partially offset by the issuance of 319,969 common shares as a result of the exercise of stock options by our employees and directors, for proceeds of $1,335,328, and $1,012,325 in excess tax benefits from stock option exercises.

Contractual Obligations

The following information is provided as of November 30, 2008 with respect to our known contractual obligations specified in the following table, aggregated by type of contractual obligation:

	Payments due by period				
Contractual Obligations	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Long-term debt obligations	--	--	--	--	--
Capital lease obligations	--	--	--	--	--
Operating lease obligations	$185,100	$172,700	$12,400	--	--
Purchase obligations	5,504,800	5,504,800	--	--	--
Other long-term liabilities	--	--	--	--	--

Purchase obligations consist primarily of purchase orders executed for inventory components.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements or financing activities.

New Accounting Pronouncements

In July 2006, the FASB adopted FASB Interpretation No. 48 "Accounting for Uncertainty in Income Taxes" ("FIN 48"). FIN 48 prescribes a recognition threshold and requires an assessment of the probability of the validity of tax positions taken or expected to be taken in income tax returns for recognition in financial statements. Only tax positions meeting a "more-likely-than-not" threshold of being sustained are recognized under FIN 48. FIN 48 also provides guidance on classification of interest and penalties and accounting and disclosures for annual and interim financial statements. We adopted FIN 48 effective December 1, 2007, for our fiscal year 2008. The adoption of FIN 48 did not have a material impact on our financial statements.

Critical Accounting Policies

We believe our most significant accounting policies relate to our accounting treatment of stock compensation of employees, our accounting treatment for income taxes, our revenue recognition associated with our no capital cost sales program, and our recognition of a technology acquisition cost intangible asset and goodwill.

Stock Compensation

In December 2004, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 123 (revised), Share Based Payment. This Statement requires that compensation costs related to share-based payment transactions, including stock options, stock appreciation rights and restricted stock be recognized in the financial statements. This Statement was effective for our fiscal quarter beginning December 1, 2005. We adopted this Statement for fiscal 2006 using a modified prospective application and, accordingly, prior period amounts have not been restated.

We previously accounted for stock-based compensation of employees using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," and related interpretations. Accordingly, compensation costs for stock options granted to employees were measured as the excess, if any, of the market price of our stock at the date of the grant over the amount an employee must pay to acquire the stock. Stock-based compensation of consultants and advisors was determined based on the fair value of the options or warrants on the grant date pursuant to the methodology of SFAS No. 123, estimated using the Black-Scholes model. The resulting amount was recognized as compensation expense and an increase in additional paid-in capital over the vesting period of the options or warrants.

In November 2005, we approved the acceleration of vesting of all unvested stock options as of November 30, 2005. The primary purpose of this accelerated vesting was to eliminate compensation expense we would recognize in our results of operations upon the adoption of SFAS 123R, which was effective for our fiscal quarter beginning December 1, 2005. After the effects of the accelerated vesting, the initial adoption of SFAS 123R was immaterial with respect to options granted before December 1, 2005. The issuance of additional stock compensation under the 2005 Stock Incentive Plan in fiscal 2008, 2007 and 2006 had an impact on our financial statements.

During fiscal 2008, we granted 253,000 stock options to our employees, directors and officers, and we issued 75,273 restricted common shares to our officers and employees. During fiscal 2007, we granted 96,000 stock options to our employees, directors and one of our officers, and we issued 9,000 restricted common shares to one of our officers. During fiscal 2006, we granted 239,000 stock options to our officers, employees, directors and one of our consultants, and we issued 68,000 restricted common shares to our officers. These stock options and restricted shares were issued at the market price on the date of grant, and they vest and are expensed in the financial statements over five years. As a result of the stock options and restricted common shares that we granted during fiscal 2008, 2007 and 2006, we have recorded $1,338,590 in stock compensation expense in fiscal 2008 in accordance with SFAS No. 123 (R). As a result of the stock options and restricted common shares that we granted during fiscal 2007 and 2006, we recorded $781,308 in stock compensation expense in fiscal 2007 in accordance with SFAS No. 123(R). As a result of the stock options and restricted common shares that we granted during fiscal 2006, we recorded $304,248 in stock compensation expense in fiscal 2006 in accordance with SFAS No. 123(R).

As of November 30, 2008, there was $5,247,791 of total unrecognized compensation cost related to nonvested share-based compensation awards granted under the 2005 Plan. That cost is expected to be recognized over a weighted average period of 4 years. As of November 30, 2007, there was $3,606,518 of total unrecognized compensation cost related to nonvested share-based compensation awards granted under the 2005 Plan. That cost was expected to be recognized over a weighted average period of 4 years. As of November 30, 2006, there was $3,260,855 of total unrecognized compensation cost related to nonvested share-based compensation awards granted under the 2005 Plan. That cost was expected to be recognized over a weighted average period of 4.5 years. No modifications were made to any share awards that required an accounting charge, and no cash was paid for share-based liabilities during fiscal 2008, fiscal 2007 or fiscal 2006.

The fair value of the stock option grants was estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted-average assumptions for fiscal 2008, 2007 and 2006: expected volatility (the measure by which the stock price has fluctuated or is expected to fluctuate during the period) 59.30% (47.00% for 2007 and 54.00% for 2006), risk-free interest rate (approximate U.S. Treasury yield in effect at the time of grant) of 2.35% (5.00% for 2007 and 2006), expected lives of approximately 6 years, and a dividend yield of 0%. The fair value of the restricted common shares was estimated based on the market value of the common shares on the date of issuance. Different assumptions could significantly change the calculated grant date fair value, and, therefore, the amount of stock compensation expense we recognize over the vesting period of the awards. We believe, however, that our estimates are appropriate.

Income Taxes

We have performed the required assessment of positive and negative evidence regarding realization of our deferred tax assets in accordance with SFAS No. 109, including our past operating results, the existence of cumulative losses over our history up to the most recent six fiscal years, and our forecast for future net income. Our assessment of our deferred tax assets included making assumptions about the growth of our net revenues and pre-tax

income in future years, making allowance for the uncertainties regarding, among other things, our future rate of growth in net revenues, the rate of adoption of our products in the marketplace, and the potential for competition to enter the marketplace. As of November 30, 2008, we have concluded that it is more likely than not that approximately $1,753,000 of such assets will be realized. The remaining tax benefits of $6,953,000 relating to stock option exercises will not be recognized on our financial statements until the reduce current taxes payable. The benefit, when recognized, will increase additional paid in capital. During fiscal 2008, we recognized deferred tax assets of approximately $1,012,000 in additional paid in capital because they were utilized and reduced current taxes payable.

For the fiscal year ended November 30, 2008, we recorded income tax expense at an estimated effective tax rate of 36 percent, and for the year ended November 30, 2007 we recorded income tax expense at an estimated effective tax rate of 35 percent.

During fiscal 2006, we adjusted our deferred tax asset valuation allowance resulting in the recognition of a net deferred tax asset of $750,000 related to the expected future benefits of our net operating loss carryforwards, in accordance with Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes." For fiscal 2006, the adjustment of our valuation allowance was net of recorded taxes. For the fiscal year ended November 30, 2006, the recorded net income tax benefit of $750,000 consisted of income tax expense recorded at an estimated effective tax rate of 34 percent in the amount of $2,604,663 for the first three quarters of fiscal 2006 and a net deferred tax benefit of $3,354,663 recorded in the fourth quarter of fiscal 2006. For fiscal 2006, the effect of recognizing this asset on our balance sheet, and associated tax benefit on our statement of operations, is to increase our net income to $10,399,957, or $0.75 per diluted common share.

Given the assumptions inherent in our financial plans, it is possible to calculate a different value for our deferred tax asset by changing one or more of the variables in our assessment. However, we believe that our evaluation of our financial plans was reasonable, and that the judgments and assumptions that we made at the time of developing the plan were appropriate.

No Capital Cost Sales Revenue Recognition

We offer to our customers in the United States a no capital cost sales program whereby we ship the INVOS System monitor to the customer at no charge. Under this program, we do not recognize any revenue upon the shipment of the INVOS System monitor. We recognize sensor revenue when we receive purchase orders and ship the product to the customer. At the time of shipment of the monitor, we capitalize the INVOS System monitor as an asset and depreciate this asset over five years. We believe this is consistent with our stated revenue recognition policy, which is compliant with Staff Accounting Bulletin No. 104, and we have considered Emerging Issues Task Force No. 00-21, "Revenue Arrangements with Multiple Deliverables."

Technology Acquisition Costs Intangible Asset and Goodwill

Technology acquisition costs and goodwill are related to our November 2008 acquisition of substantially all of the assets of ICU Data Systems, Inc., a technology development company, for approximately $2,000,000 in cash plus the assumption of specified liabilities. Goodwill represents the amount by which the purchase price of the acquired business exceeds the estimated fair value of the net tangible and separately identifiable intangible assets of the acquired business, in addition to transaction costs recorded at cost. Goodwill is not amortized, but is tested at least annually for impairment. The technology acquisition costs intangible asset has an estimated useful life of 20 years, based on several patents that we have filed related to the technology, and will be amortized on a straight-line basis over the estimated useful life. Intangible assets and goodwill are reviewed annually for impairment at the end of our fiscal year, and whenever events or changes in circumstances indicate that the carrying value of the asset may not be recovered. We evaluate impairment by comparing the fair value of the intangible asset, determined using a cash flow method, with its carrying value. No amortization expense was recorded related to the technology acquisition costs intangible asset for 2008 because the transaction closed in November 2008. As of November 30, 2008, the carrying value of the technology acquisition costs intangible asset was $246,318, and the carrying value of the goodwill was $1,679,713.

We estimated the value of the technology acquisition costs intangible asset based on a valuation model that included estimating the future cash flows of the technology and discounting the net cash flows back to their present value using an appropriate risk-adjusted rate of return (discount rate). The discount rate used was determined at the

time of the acquisition in accordance with accepted valuation methods. Our assessment of the estimated fair value included making assumptions about the expected net revenues and operating income related to the acquired technology in future years, making allowance for the uncertainties regarding, among other things, the time and cost associated with the further advancement of the design and performance of the technology to ready it for market launch, the rate of adoption of the technology once it is launched into the marketplace, and the potential for competition related to the launched technology.

Given the assumptions inherent in our valuation model, it is possible to calculate a different value for our technology acquisition costs intangible asset by changing one or more of the variables within our model. However, we believe that our evaluation of our valuation model was reasonable, and that the judgments and assumptions that we made at the time of developing the model upon acquisition of ICU Data Systems, Inc. were appropriate.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The table below provides information about our financial instruments that are sensitive to changes in interest rates, consisting of investments in United States government agency bonds and treasury bills. For these financial instruments, the table presents principal cash flows and related weighted average interest rates by expected maturity dates. Weighted average fixed rates are based on the contract rates. The actual cash flows of all instruments are denominated in U.S. dollars. We invest our cash on hand not needed in current operations in United States government agency bonds with varying maturity dates with the intention of holding them until maturity.

	November 30, 2008 Expected Maturity Dates By Fiscal Year							
	2009	2010	2011	2012	2013	Thereafter	Total	Fair Value
Investments:								
Marketable Securities and Long-term Investments:								
Fixed Rate ($).....	19,992,545	3,845,241	--	8,992,469	--	--	32,830,255	32,823,806
Average interest rate...	.53%	4.72%	N/A	5.03%	N/A	N/A	2.25%	

	November 30, 2007 Expected Maturity Dates By Fiscal Year							
	2008	2009	2010	2011	2012	Thereafter	Total	Fair Value
Investments:								
Marketable Securities and Long-term Investments:								
Fixed Rate ($).....	18,978,074	--	8,666,244	6,996,231	17,990,624	--	52,631,173	52,785,570
Average interest rate	5.25%	N/A	5.08%	5.23%	5.12%	N/A	5.17%	

During fiscal 2008, four of our bonds matured for approximately $19,000,000 and five of our bonds that were due to mature in 2010, 2011 and 2012 were called for approximately $21,000,000. We reinvested approximately $35,000,000 of the proceeds into three new treasury bills with maturity dates in 2008 and 2009, one of which matured in fiscal 2008 for approximately $15,000,000 and the proceeds have not been reinvested as of November 30, 2008.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of Somanetics Corporation is responsible for establishing and maintaining adequate internal control over financial reporting. Somanetics Corporation's internal control system was designed to provide reasonable assurance to the Company's management and board of directors regarding the preparation and fair presentation of published financial statements. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Somanetics Corporation management assessed the effectiveness of the Company's internal control over financial reporting as of November 30, 2008. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework. Based on our assessment, we have concluded that, as of November 30, 2008, the Company's internal control over financial reporting is effective based on those criteria.

Somanetics Corporation's independent registered public accounting firm, that audited the financial statements prepared by the Company included in Item 8 of this report, has issued a report on the financial statements and on the effectiveness of the Company's internal control over financial reporting, which is included on the next page.

January 21, 2009

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
Somanetics Corporation
Troy, Michigan

We have audited the accompanying balance sheets of Somanetics Corporation (the "Company") as of November 30, 2008 and 2007, and the related statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended November 30, 2008. We also have audited the Company's internal control over financial reporting as of November 30, 2008, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Member of
Deloitte Touche Tohmatsu

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Somanetics Corporation as of November 30, 2008 and 2007, and the results of its operations and its cash flows for each of the three years in the period ended November 30, 2008, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of November 30, 2008, based on the criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Deloitte & Touche LLP

Detroit, Michigan
February 9, 2009

SOMANETICS CORPORATION

BALANCE SHEETS

	November 30, 2008	November 30, 2007
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents (Note 2)	$ 37,166,141	$ 33,172,977
Marketable securities	19,992,545	18,978,074
Accounts receivable	7,862,103	7,486,571
Inventory (Note 2)	2,960,422	1,998,284
Prepaid expenses	597,460	560,885
Accrued interest receivable	16,667	551,117
Deferred tax asset – current (Note 5)	164,615	3,069,929
Total current assets	68,759,953	65,817,837
PROPERTY AND EQUIPMENT: (Note 2)		
Demonstration and no capital cost sales equipment at customers	3,919,296	3,386,287
Machinery and equipment	1,638,597	1,531,387
Furniture and fixtures	504,485	307,919
Leasehold improvements	197,450	196,700
Total	6,259,828	5,422,293
Less accumulated depreciation and amortization	(3,418,697)	(2,931,596)
Net property and equipment	2,841,131	2,490,697
OTHER ASSETS:		
Long-term investments	12,837,710	33,653,099
Deferred tax asset – non-current (Note 5)	1,587,977	3,004,755
Intangible assets, net (Note 2)	246,318	3,097
Goodwill (Note 2)	1,679,713	--
Other	15,000	15,000
Total other assets	16,366,718	36,675,951
TOTAL ASSETS	$ 87,967,802	$104,984,485
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 1,271,058	$ 1,118,003
Accrued liabilities (Notes 4 and 6)	1,848,672	1,701,481
Total current liabilities	3,119,730	2,819,484
COMMITMENTS AND CONTINGENCIES (Note 6)		
SHAREHOLDERS' EQUITY: (Note 3)		
Preferred shares; authorized, 1,000,000 shares of $.01 par value; no shares issued or outstanding	--	--
Common shares; authorized, 20,000,000 shares of $.01 par value; issued and outstanding, 12,034,074 shares at November 30, 2008, and 13,443,961 shares at November 30, 2007	120,341	134,440
Additional paid-in capital	91,330,305	119,079,383
Accumulated deficit	(6,602,574)	(17,048,822)
Total shareholders' equity	84,848,072	102,165,001
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$ 87,967,802	$104,984,485

See notes to financial statements

SOMANETICS CORPORATION

STATEMENTS OF OPERATIONS

	For the Years Ended November 30,		
	2008	2007	2006
NET REVENUES (Notes 2 and 9)	$ 47,455,617	$ 38,585,832	$ 28,700,600
COST OF SALES	6,249,256	4,726,146	3,565,588
Gross margin	41,206,361	33,859,686	25,135,012
OPERATING EXPENSES:			
Research, development and engineering (Note 2)	1,259,227	668,815	1,582,521
Selling, general and administrative (Note 2)	26,166,120	22,269,184	16,484,567
Total operating expenses	27,425,347	22,937,999	18,067,088
OPERATING INCOME	13,781,014	10,921,687	7,067,924
OTHER INCOME:			
Interest income	2,629,967	4,008,537	2,582,033
Total other income	2,629,967	4,008,537	2,582,033
INCOME BEFORE INCOME TAXES	$ 16,410,981	$ 14,930,224	$ 9,649,957
INCOME TAX (EXPENSE) BENEFIT (Note 5)	(5,964,734)	(5,247,943)	750,000
NET INCOME	$ 10,446,247	$ 9,682,281	$ 10,399,957
NET INCOME PER COMMON SHARE - BASIC (Note 2)	$ .82	$ .73	$ .83
NET INCOME PER COMMON SHARE - DILUTED (Note 2)	$ .76	$ .67	$ .75
WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING -- BASIC (Note 2)	12,671,452	13,213,428	12,463,075
WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING -- DILUTED (Note 2)	13,671,730	14,384,445	13,824,467

See notes to financial statements

SOMANETICS CORPORATION

STATEMENTS OF SHAREHOLDERS' EQUITY

	Common Shares	Share Value	Additional Paid-In Capital	Accumulated Deficit	Total Shareholders' Equity	Comprehensive Income
Balance at December 1, 2005	10,715,885	$ 107,159	$ 64,864,554	$ (37,131,060)	$ 27,840,653	
For cash, less issuance costs of $3,967,226	2,300,000	23,000	51,209,774		51,232,774	
For cash, exercise of stock options	79,742	797	439,116		439,913	
Stock compensation expense	--		304,248		304,248	
Restricted share grant	68,000	680	(680)		--	
Net income and comprehensive income	--			10,399,957	10,399,957	$ 10,399,957
Balance at November 30, 2006	13,163,627	$ 131,636	$ 116,817,012	$ (26,731,103)	$ 90,217,545	
For cash, exercise of stock options	271,334	2,714	1,481,153		1,483,867	
Stock compensation expense	--		781,308		781,308	
Restricted share grant	9,000	90	(90)		--	
Net income and comprehensive income	--			9,682,281	9,682,281	$ 9,682,281
Balance at November 30, 2007	13,443,961	$ 134,440	$ 119,079,383	$ (17,048,822)	$ 102,165,001	
For cash, exercise of stock options	319,969	3,199	1,332,129		1,335,328	
Stock compensation expense	--		1,338,590		1,338,590	
Restricted share grant	75,273	753	(753)		--	
Repurchase of common shares	(1,805,129)	(18,051)	(31,431,369)		(31,449,420)	
Income tax benefit from stock option exercises	--		1,012,325		1,012,325	
Net income and comprehensive income	--			10,446,247	10,446,247	$ 10,446,247
Balance at November 30, 2008	12,034,074	$ 120,341	$ 91,330,305	$ (6,602,574)	$ 84,848,072	

See notes to financial statements

SOMANETICS CORPORATION

STATEMENTS OF CASH FLOWS

	For the Years Ended November 30,		
	2008	2007	2006
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income	$ 10,446,247	$ 9,682,281	$ 10,399,957
Adjustments to reconcile net income to net cash provided by operations:			
Income tax expense (benefit)	5,586,906	5,076,276	(750,000)
Depreciation and amortization	951,906	806,034	592,061
Stock compensation expense	1,338,590	781,308	304,248
Excess tax benefits from stock option exercises	(1,012,325)	–	–
Changes in assets and liabilities net of effects from purchase of ICU Data Systems, Inc.:			
Accounts receivable (increase)	(375,532)	(2,746,528)	(1,208,303)
Accrued interest income (increase) decrease	534,450	(199,451)	(351,666)
Inventory (increase)	(1,606,952)	(658,895)	(1,943,049)
Deferred income tax benefit (increase)	(252,488)	(400,960)	–
Prepaid expenses (increase) decrease	(36,575)	(66,063)	128,481
Accounts payable increase	153,055	72,276	332,931
Accrued liabilities increase (decrease)	147,191	541,711	(5,825)
Accrued income tax expense (increase) decrease	--	194,000	(194,000)
Net cash provided by operating activities	15,874,473	13,081,989	7,304,835
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of marketable securities and long-term investments	(35,021,241)	(63,795,275)	(47,835,897)
Proceeds from maturities of marketable securities and long-term investments	54,822,160	54,000,000	5,000,000
Payment for purchase of ICU Data Systems, Inc.	(1,926,031)	–	–
Acquisition of property and equipment	(654,430)	(332,473)	(554,993)
Net cash provided by (used in) investing activities	17,220,458	(10,127,748)	(43,390,890)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from issuance of common shares	–	–	51,232,774
Repurchase of common shares	(31,449,420)	–	–
Excess tax benefits from stock option exercises	1,012,325	–	–
Proceeds from issuance of common shares due to exercise of stock options	1,335,328	1,483,867	439,913
Net cash (used in) provided by financing activities	(29,101,767)	1,483,867	51,672,687
NET INCREASE IN CASH AND CASH EQUIVALENTS	3,993,164	4,438,108	15,586,632
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	33,172,977	28,734,869	13,148,237
CASH AND CASH EQUIVALENTS, END OF PERIOD	$ 37,166,141	$ 33,172,977	$ 28,734,869
Supplemental Disclosure of Non cash investing activities:			
Demonstration and no capital cost sales equipment capitalized from inventory (Note 2)	$ 644,814	$ 833,069	$ 828,692
Supplemental Disclosure of Taxes paid:			
Federal and state income taxes (Note 5)	$ 600,317	$ 572,627	$ --

See notes to financial statements

NOTES TO FINANCIAL STATEMENTS

1. Organization and Operations

We are a Michigan corporation that was formed in 1982. We develop, manufacture and market the INVOS® System, a non-invasive patient monitoring system that continuously measures changes in blood oxygen levels. The principal markets for our products are the United States, Europe, and Japan. The INVOS System, based on our In Vivo Optical Spectroscopy, or INVOS, technology, is used to measure changes in regional blood oxygen saturation in the brain and elsewhere in the body in tissues beneath the sensor in patients with or at risk for restricted blood flow. The INVOS System measurement is made by transmitting low-intensity visible and near-infrared light through a portion of the body with disposable sensors, and detecting the manner in which the exposed substance interacts with light at specific wavelengths.

In September 2000 we received FDA clearance to market our model 5100 INVOS System in the United States, which has the added capability of being able to monitor pediatric patients. In November 2005, we received 510(k) clearance from the FDA to market our INVOS System to monitor changes in somatic tissue blood oxygen saturation in regions of the body other than the brain in patients with or at risk for restricted blood flow. In May 2008, we received 510(k) clearance from the FDA to market our INVOS System to monitor changes in blood oxygen saturation in any tissues beneath the sensor, not limited to brain and somatic tissue, in any individual.

In November 2008, we acquired substantially all of the assets of ICU Data Systems, Inc., a company that has developed a patented technology that integrates data from a broad array of hospital bedside devices, such as physiological monitors, ventilators and infusion devices, into a single bedside display for comparison, data management and storage. We plan to further develop and launch our newly-acquired data integration technology as a stand-alone device, and we expect to invest to combine the ICU Data Systems and INVOS System technologies in a single product.

2. Summary of Significant Accounting Policies

Cash Equivalents consist of short-term, interest-bearing investments maturing within three months of our acquisition of them.

Marketable Securities and Long-Term Investments consist of Aaa-rated United States government agency bonds and treasury bills, classified as held to maturity, maturing approximately five months to five years from the date of acquisition, are stated at an amortized cost of $32,830,255, and have a market value of $32,823,806 at November 30, 2008.

Inventory is stated at the lower of cost or market on a first-in, first-out (FIFO) basis. Inventory consists of:

	November 30,	
	2008	2007
Purchased components	$ 2,141,050	$ 1,702,878
Finished goods	587,808	174,451
Work in process	231,564	120,955
Total	$ 2,960,422	$ 1,998,284

In November 2007, we wrote off inventory of $180,521, due to obsolescence and the uncertainty regarding future utilization of these products.

Property and Equipment are stated at cost. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets, which range from two to ten years. Depreciation expense was $948,809, $799,122 and $585,149 for the fiscal years ended November 30, 2008, November 30, 2007 and November 30, 2006, respectively. We offer to our United States customers a no capital cost sales program whereby we ship the INVOS System monitor to the customer at no charge. The INVOS System monitors that are shipped to

our customers are classified as no capital cost sales equipment and are depreciated over five years to cost of goods sold. All other depreciation expense is recorded as a selling, general and administrative expense. As of November 30, 2008, we have capitalized $3,919,296 in costs for INVOS System monitors being used as demonstration and no capital cost sales equipment, and these assets had a net book value of $1,820,503. As of November 30, 2007, we have capitalized $3,386,287 in costs for INVOS System monitors being used as demonstration and no capital cost sales equipment, and these assets had a net book value of $1,801,702. Property and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the net book value of the asset may not be recovered.

Intangible Assets and Goodwill consist of patents and trademarks, and technology acquisition costs and goodwill. Patents and trademarks are recorded at cost and are being amortized on the straight-line method over 17 years. The carrying amount and accumulated amortization of these patents and trademarks are as follows:

	November 30,	
	2008	2007
Patents and trademarks	$ 111,733	$ 111,733
Less: accumulated amortization	(111,733)	(108,636)
Total	$ --	$ 3,097

Amortization expense was $3,097 for fiscal year ended November 30, 2008 and was $6,912 for the fiscal years ended November 30, 2007 and November 30, 2006.

Technology acquisition costs and goodwill are related to our November 2008 acquisition of substantially all of the assets of ICU Data Systems, Inc., a technology development company, for approximately $2,000,000 in cash plus the assumption of specified liabilities. Goodwill represents the amount by which the purchase price of the acquired business exceeds the estimated fair value of the net tangible and separately identifiable intangible assets of the acquired business, in addition to transaction costs recorded at cost. Goodwill is not amortized, but is tested at least annually for impairment. The technology acquisition costs intangible asset has an estimated useful life of 20 years, based on several patents that we have filed related to the technology, and will be amortized on a straight-line basis over the estimated useful life. Intangible assets and goodwill are reviewed annually for impairment at the end of our fiscal year, and whenever events or changes in circumstances indicate that the carrying value of the asset may not be recovered. We evaluate impairment by comparing the fair value of the intangible asset, determined using a cash flow method, with its carrying value.

No amortization expense was recorded related to the technology acquisition costs intangible asset for 2008 because the transaction closed in November 2008. Amortization expense for each of the next 20 fiscal years related to the technology acquisition costs intangible asset is expected to be approximately $12,300. As of November 30, 2008, the carrying value of the technology acquisition costs intangible asset was $246,318, and the carrying value of the goodwill was $1,679,713.

We estimated the value of the technology acquisition costs intangible asset based on a valuation model that included estimating the future cash flows of the technology and discounting the net cash flows back to their present value using an appropriate risk-adjusted rate of return (discount rate). The discount rate used was determined at the time of the acquisition in accordance with accepted valuation methods. Our assessment of the estimated fair value included making assumptions about the expected net revenues and operating income related to the acquired technology in future years, making allowance for the uncertainties regarding, among other things, the time and cost associated with the further advancement of the design and performance of the technology to ready it for market launch, the rate of adoption of the technology once it is launched into the marketplace, and the potential for competition related to the launched technology.

Revenue Recognition, including direct sales, sales through sales representatives and sales to international distributors, occurs for our products when there is persuasive evidence of an arrangement with the customer, the product has been delivered, the sales price is fixed or determinable, and collectibility is reasonably assured. The

product is considered delivered to the customer once we have shipped it, as this is when title and risk of loss have transferred. We have considered Staff Accounting Bulletin No. 104 and Emerging Issues Task Force No. 00-21, "Revenue Arrangements with Multiple Deliverables" in determining our revenue recognition policy.

Research, Development and Engineering costs are expensed as incurred.

Net Income Per Common Share – basic and diluted is computed using the weighted average number of common shares outstanding during each period. Weighted average shares outstanding – diluted, for the years ended November 30, 2008, November 30, 2007 and November 30, 2006, includes the potential dilution that could occur for common shares issuable under stock options. As of November 30, 2008, 2007 and 2006, the difference between weighted average shares – diluted and weighted average shares – basic is calculated as follows:

	2008	2007	2006
Weighted average shares – basic	12,671,452	13,213,428	12,463,075
Add: effect of dilutive common shares and warrants	1,000,278	1,171,017	1,361,392
Weighted average shares – diluted	13,671,730	14,384,445	13,824,467

At November 30, 2008, 2007 and 2006, there were no stock options outstanding that were excluded from the computation of net income per common share – diluted. In addition, at November 30, 2008, we had outstanding 1,822,187 options to purchase common shares, as of November 30, 2007, we had outstanding 1,895,656 options to purchase common shares and as of November 30, 2006, we had outstanding 2,071,990 options to purchase common shares.

Common Share Repurchase Program In April 2008, our Board of Directors authorized the repurchase of up to $15 million of our common shares. Purchases may be made from time to time in the open market or in privately negotiated transactions. The prices, timing and amount of, and purposes for, any purchases will be determined by management. In May 2008, our Board of Directors authorized the repurchase of up to an additional $15 million of our common shares, and in July 2008, our Board of Directors authorized the repurchase of up to an additional $15 million of our common shares, for a total of $45 million of our common shares under the repurchase program. During fiscal 2008, we repurchased 1,805,129 common shares at an average price of $17.42 per share and an aggregate cost of $31,449,420.

Accounting Pronouncements In July 2006, the FASB adopted FASB Interpretation No. 48 "Accounting for Uncertainty in Income Taxes" ("FIN 48"). FIN 48 prescribes a recognition threshold and requires an assessment of the probability of the validity of tax positions taken or expected to be taken in income tax returns for recognition in financial statements. Only tax positions meeting a "more-likely-than-not" threshold of being sustained are recognized under FIN 48. FIN 48 also provides guidance on classification of interest and penalties and accounting and disclosures for annual and interim financial statements. We adopted FIN 48 effective December 1, 2007, for our fiscal 2008. The adoption of FIN 48 did not have a material impact on our financial statements.

Use Of Estimates The preparation of financial statements in conformity with generally accepted accounting principles requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported amounts of revenues and expenses for each fiscal period. Actual results could differ from those estimated.

3. Stock Offerings and Common Shares

On March 6, 2006, we completed a public offering of 2,300,000 of our newly-issued common shares at a public offering price of $24.00 per share. The net proceeds, after deducting the underwriting discount and the expense of the offering, were $51,232,774.

During fiscal 2008, we issued 319,969 common shares as a result of stock option exercises by our employees and directors for gross proceeds to us of $1,335,328. During fiscal 2007, we issued 271,334 common

shares as a result of stock option exercises by our employees, a former director and a consultant for gross proceeds to us of $1,483,867. During fiscal 2006, we issued 79,742 common shares as a result of stock option exercises by our employees and a former director for gross proceeds of $439,913.

Common shares reserved for future issuance upon exercise of stock options as discussed above at November 30, 2008, are as follows:

1991 Incentive Stock Option Plan	14,663
1997 Stock Option Plan	1,076,308
2005 Stock Incentive Plan	1,043,727
Options Granted Independent of Option Plans	55,000
Total shares reserved for future issuance	2,189,698

4. Accrued Liabilities

Accrued liabilities consist of the following:

	November 30,	
	2008	2007
Incentive Compensation	$ 978,520	$ 958,642
Sales Commissions	637,516	548,046
Taxes	121,683	--
Clinical Research	51,671	110,639
Professional Fees	39,500	61,550
Warranty	19,440	19,800
401(k) Match	342	--
Royalty	--	2,804
Total	$1,848,672	$1,701,481

5. Income Taxes

Deferred income taxes reflect the estimated future tax effect of (1) temporary differences between the amount of assets and liabilities for financial reporting purposes and such amounts as measured by tax laws and regulations and (2) net operating loss and tax credit carryforwards. Our deferred tax assets primarily represent the tax benefit of net operating loss carryforwards and research and general business tax credit carryforwards. We had deferred tax assets of approximately $8,706,000 as of November 30, 2008, which include approximately $6,953,000 related to the exercise of stock options, which will not be recognized as deferred tax assets on our balance sheet until such time as they are utilized and reduce current taxes payable. If realized in the future, these tax benefits will be recognized in additional paid in capital. During fiscal 2008, we recognized deferred tax assets of approximately $1,012,000 in additional paid in capital because they were utilized and reduced current taxes payable. The change in the valuation related to future stock option tax benefits is attributable to current year tax deductions from stock options exercised. We had deferred tax assets of approximately $12,099,000 as of November 30, 2007, which include approximately $6,024,000 related to the exercise of stock options, as described above. We have used a statutory federal income tax rate of 34 percent when calculating our deferred tax assets. We paid income taxes in fiscal 2008 and 2007 of approximately $252,000 and $401,000 respectively for alternative minimum tax due, and paid no income taxes in fiscal 2006. The amounts paid for alternative minimum tax in fiscal 2008 and 2007 have been recorded as tax credit carryforward deferred tax assets on our balance sheet, as shown below.

The components of deferred income tax assets as of November 30, 2008 and 2007 were as follows:

	November 30,	
	2008	2007
	(in thousands)	
Net operating loss carryforwards	$ 7,119	$ 11,037
Stock compensation expense	885	369
Other	85	65
Basis difference of fixed assets and intangibles	(212)	51
Alternative minimum tax credit carryforward	653	401
Research and general business tax credit carryforwards	176	176
Subtotal	8,706	12,099
Reduction for future stock option tax benefits valuation	(6,953)	(6,024)
Deferred tax asset	$ 1,753	$ 6,075

The items accounting for the difference between income taxes computed at the federal statutory rate and the provision for income taxes are as follows:

	For the Fiscal Year Ended November 30,		
	2008	2007	2006
Taxes at U.S. statutory rate – 34 percent	$ 5,579,734	$ 5,076,276	$ 3,280,985
State and local income taxes	325,763	122,347	--
Nondeductible meals and entertainment	59,237	49,320	37,628
Change in valuation allowance	--	--	(4,068,613)
Income tax expense (benefit) from continuing operations	$ 5,964,734	$ 5,247,943	$ (750,000)
Effective tax rate	36.3%	35.1%	(7.8)%

The components of current and deferred federal and state income tax expense and benefit are as follows:

	For the Fiscal Year Ended November 30,		
	2008	2007	2006
Federal income tax expense - current	$ 252,488	$ 206,960	$ 194,000
Federal income tax expense (benefit) - deferred	5,360,450	4,891,042	(944,000)
State income tax expense - current	325,763	122,347	--
State income tax expense - deferred	26,033	27,594	--
Income tax expense (benefit) from continuing operations	$ 5,964,734	$ 5,247,943	$ (750,000)

We have performed the required assessment of positive and negative evidence regarding realization of our deferred tax assets in accordance with SFAS No. 109, "Accounting for Income Taxes," including our past operating results, the existence of cumulative losses over our history up to the most recent six fiscal years, and our forecast for future net income. Our assessment of our deferred tax assets included making assumptions about the growth of our net revenues and pre-tax income in future years, making allowance for the uncertainties regarding, among other things, our future rate of growth in net revenues, the rate of adoption of our products in the marketplace, and the potential for competition to enter the marketplace. As of November 30, 2008, we have concluded that it is more likely than not that approximately $1,753,000 of our net deferred tax assets will be realized. The remaining tax benefits of $6,953,000 relating to stock option exercises will not be recognized on our financial statements until they reduce current taxes payable. The benefit, when recognized, will increase additional paid in capital.

For the fiscal year ended November 30, 2008, we recorded a net income tax expense of $5,964,734, which consisted of income tax expense recorded at an estimated effective tax rate of 36 percent. For the fiscal year ended

November 30, 2007, we recorded a net income tax expense of $5,247,943, which consisted of income tax expense recorded at an estimated effective tax rate of 35 percent. For fiscal 2006, the reversal of our valuation allowance was net of recorded taxes. For the fiscal year ended November 30, 2006, we recorded a net income tax benefit of $750,000, which consisted of income tax expense recorded at an estimated effective tax rate of 34 percent in the amount of $2,604,663 for the first three quarters of fiscal 2006 and a net deferred tax benefit of $3,354,663 recorded in the fourth quarter of fiscal 2006.

As of November 30, 2008, net operating loss carryforwards of approximately $20.5 million were available for Federal income tax purposes for future years. Research and business general tax credits of approximately $176,000 are also available to offset future taxes, and alternative minimum tax credits of approximately $653,000 are also available to offset future taxes. These losses and credits expire, if unused, at various dates from 2009 through 2025.

Use of our net operating loss carryforwards, tax credit carryforwards and certain future deductions could be restricted, in the event of future changes in our equity structure, by provisions contained in the Tax Reform Act of 1986.

6. Commitments and Contingencies

We have a lease agreement for a 23,392 square foot, stand-alone office, assembly and warehouse facility. The current lease, as amended, expires December 31, 2009. In addition, on November 14, 2008, we assumed a lease for approximately 900 square feet of office space used primarily for engineering activities. This lease expires November 30, 2009.

Operating lease expense for the years ended November 30, 2008, 2007 and 2006 was approximately $168,200, $164,300, and $163,300, respectively. Approximate future minimum lease commitments are as follows:

Year ending November 30,	
2009	$ 172,700
2010	12,400
2011	--
Total	$ 185,100

We have executed purchase orders for inventory components representing purchase obligations of approximately $5,504,800 as of November 30, 2008.

In December 1991, we amended and restated our profit sharing plan to include a 401(k) plan covering substantially all employees. Under provisions of the plan, participants may contribute, annually, between 1 percent and 25 percent of their compensation. In November 2004, our board of directors approved matching contributions to the 401(k) Plan equal to $2 for every $1 contributed by Company employees to the 401(k) Plan at each payroll date on or after January 1, 2005, up to a Company contribution of 4 percent of the employee's compensation, and continuing until terminated by further action of the board of directors. In addition, at the discretion of the board of directors, we may make other annual discretionary contributions to the plan. Matching contributions made for fiscal 2008, 2007 and 2006 were approximately $428,000, $338,000 and $215,000, respectively.

As of November 30, 2008, we have amended and restated employment agreements or amended and restated change in control agreements with all of our officers. The employment agreement with our Senior Vice President, U.S. Sales and Marketing and the change in control agreements with seven of our officers provide for severance benefits equal to one year's salary upon termination of employment without cause or for good reason 90 days before to one year after a change in control of the Company that occurs by June 17, 2011. In addition, on June 17, 2008, we amended and restated our employment agreement with our President and Chief Executive Officer that was scheduled to expire April 30, 2009. The amended and restated agreement provides for severance benefits consisting of fringe benefits for one year (two years if termination is in connection with a Change in Control) and a lump sum payment equal to one year's salary (two years if termination is in connection with a Change in Control), plus the target bonus for the year of termination (which must be at least 65% of his salary) (two times the target bonus if

termination is in connection with a Change in Control), plus a pro rata bonus through the date of termination upon termination of his employment without cause or for good reason. His amended and restated employment agreement expires June 17, 2011, unless earlier terminated as provided in the agreement, except that the term is automatically extended for additional one-year periods effective one year before it would otherwise expire (i.e., so that the remaining term will be two years), unless either party provides the other with notice that the term will not be extended and such notice provided at least one year before the term would otherwise expire. All officers have agreed not to compete with us and not to solicit our employees during specified periods following the termination of employment, and they have agreed to various confidentiality obligations. The estimated financial exposure of these employment agreements, upon a change of control of the Company and termination of all of the executives without cause, is approximately $2,191,000.

We entered into a Contract Development and Exclusive Licensing Agreement with NeuroPhysics Corporation as of September 18, 2006. The agreement provides us with feasibility research, contract development and consulting services and certain ownership and licensing rights, subject to the rights of the United States Federal government, to intellectual property and technical knowledge associated with several novel near-infrared spectroscopy, or "NIRS", and imaging technologies and products under development at NeuroPhysics. We paid an initial license fee of $1,000,000. We terminated this agreement in February 2009, except for various provisions regarding our ownership of the technology related to the potential new products. In February 2009, we entered into a similar agreement with Shirley Research Corporation and Hugh F. Stoddart and Hugh A. Stoddart, and have agreed to pay monthly development and consulting fees of $15,000 a month during the term of the agreement and a royalty on future sales of the new products.

We may become subject to product liability claims by patients or physicians, and may become a defendant in product liability or malpractice litigation. We have obtained product liability insurance and an umbrella policy. We might not be able to maintain such insurance or such insurance might not be sufficient to protect us against product liability.

7. Stock Option Plans

In February 1991 and January 1997, we adopted stock option plans, and in February 2005, we adopted a stock incentive plan, for our key employees, directors, consultants and advisors and, under the 2005 plan, independent contractors and agents. On April 19, 2007, our shareholders approved an amendment to the Somanetics Corporation 2005 Stock Incentive Plan to increase the number of common shares reserved for issuance under the 2005 Plan.

The stock option plans provided for our issuance of options to purchase a maximum of 115,000 common shares under the 1991 plan and 2,560,000 common shares under the 1997 plan. The 2005 plan permits us to grant stock options, including both nonqualified options and incentive options, restricted stock and restricted stock units, up to 1,200,000 common shares. In addition, we granted options to employees independent of the plans. Options granted generally have a 10-year life, and vest over a three-year period, except the options granted in fiscal 2005 vested on November 30, 2005 and the options and restricted stock granted in fiscal 2006, fiscal 2007 and fiscal 2008 vest over a five-year period. Awards and expirations under the 1991 plan, 1997 plan, 2005 plan and independent of the plans during the years ended November 30, 2008, 2007 and 2006 are listed below.

At November 30, 2008, no additional options may be granted under the 1991 plan or the 1997 plan, and 367,511 common shares were available to be granted or awarded under the 2005 plan.

During fiscal 2008, we granted 253,000 stock options to our employees, directors and officers, at the market price on the date of grant, during fiscal 2007, we granted 96,000 stock options to our employees, directors and one of our officers, at the market price on the date of grant, and during fiscal 2006, we granted 239,000 stock options to our officers, employees, directors and one of our consultants, at the market price on the date of grant. During fiscal 2008, we also issued 5,273 restricted common shares to our employees in January 2008 and 70,000 restricted common shares to our officers in March 2008 valued at the market price on the date of grant of $21.81 and $12.61 respectively. During fiscal 2007, we issued 9,000 restricted common shares to our officers valued at the market price on the date of grant of $18.93, and during fiscal 2006, we issued 68,000 restricted common shares to

our officers valued at the market price on the date of grant of $18.06. These stock options and restricted shares vest and are expensed in the financial statements over five years. During fiscal 2008, 66,800 stock options and 15,400 restricted common shares vested, during fiscal 2007 47,800 stock options and 13,600 restricted common shares vested, and during fiscal 2006 no stock options or restricted common shares vested. As a result of the stock options and restricted common shares that we granted during fiscal 2006, 2007 and 2008, we have recorded $1,338,590 in stock compensation expense in fiscal 2008 in accordance with SFAS No. 123 (R). As a result of the stock options and restricted common shares that we granted during fiscal 2006 and 2007, we recorded $781,308 in stock compensation expense in fiscal 2007 in accordance with SFAS No. 123(R). As a result of the stock options and restricted common shares that we granted during fiscal 2006, we recorded $304,248 in stock compensation expense in fiscal 2006 in accordance with SFAS No. 123(R).

As of November 30, 2008, there was $5,247,791 of total unrecognized compensation cost related to nonvested share-based compensation awards granted under the 2005 Plan. That cost is expected to be recognized over a weighted average period of 4 years. As of November 30, 2007, there was $3,606,518 of total unrecognized compensation cost related to nonvested share-based compensation awards granted under the 2005 Plan. That cost was expected to be recognized over a weighted average period of 4 years. As of November 30, 2006, there was $3,260,855 of total unrecognized compensation cost related to nonvested share-based compensation awards granted under the 2005 Plan. That cost was expected to be recognized over a weighted average period of 4.5 years.

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted-average assumptions used for 2008, 2007 and 2006: expected volatility (the measure by which the stock price has fluctuated or is expected to fluctuate during the period) of 59.30 percent for 2008 (47.00 percent for 2007 and 54.00 percent for 2006), risk-free interest rate (approximate U.S. Treasury yield in effect at the time of grant) of 2.35 percent for 2008 (5.0 percent for 2007 and 2006), expected lives of 6 years for 2008 (6 years for 2007 and 2006) and dividend yield of 0 percent. The fair value of restricted common shares was estimated based on the market value of the common shares on the date of issuance.

A summary of our stock option activity and related information for the years ended November 30, 2008, 2007 and 2006 is as follows:

	2008		2007		2006	
	Common Shares	Weighted Average Exercise Price	Common Shares	Weighted Average Exercise Price	Common Shares	Weighted Average Exercise Price
Options outstanding December 1,	1,895,656	$ 6.75	2,071,990	$ 6.01	1,914,232	$ 4.59
Options granted	253,000	13.56	96,000	19.25	239,000	17.30
Options exercised	(319,969)	4.17	(271,334)	5.47	(79,742)	5.52
Options canceled	(6,500)	14.92	(1,000)	18.85	(1,500)	17.56
Options outstanding November 30,	1,822,187	8.12	1,895,656	6.75	2,071,990	6.01
Options exercisable November 30,	1,352,587	$ 5.51	1,609,456	$ 4.76	1,832,990	$ 4.53

As of November 30, 2008, the aggregate intrinsic value of stock options outstanding was $17,165,002, and the aggregate intrinsic value of stock options exercisable was $16,271,622. As of November 30, 2007, the aggregate intrinsic value of stock options outstanding was $25,136,399, and the aggregate intrinsic value of stock options exercisable was $24,544,204. As of November 30, 2006, the aggregate intrinsic value of stock options outstanding was $27,743,946, and the aggregate intrinsic value of stock options exercisable was $27,256,561. The total intrinsic value of options exercised during fiscal 2008, 2007 and 2006 was $5,589,429, $3,707,681 and $1,188,554, respectively.

A summary of the price ranges of our stock options outstanding and exercisable as of November 30, 2008 is as follows:

	Options outstanding			Options exercisable		
Range of Exercise Prices	Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Life (years)	Options Exercisable	Weighted Average Exercise Price	Weighted Average Remaining Life (years)
$1.70 - $10.00	1,067,438	$2.92	3.23	1,067,438	$2.92	3.23
$10.01 - $15.00	366,253	13.11	7.99	173,753	13.67	6.50
$15.01 - $19.93	388,496	17.70	8.08	111,396	17.69	7.74
Total	1,822,187	$ 8.12	5.22	1,352,587	$5.51	4.02

The weighted-average grant-date fair value of options granted during fiscal 2008, 2007 and 2006 was $7.83, $9.97 and $9.78, respectively. The total fair value of shares vested during fiscal 2008, 2007 and 2006 was $936,463, $713,021 and $0, respectively. No modifications were made to any share awards that required an accounting charge, and no cash was paid for share-based liabilities during fiscal 2008, 2007 and 2006.

8. Acquisitions

In November 2008, we acquired substantially all of the assets of ICU Data Systems, Inc., a technology development company, for approximately $2,000,000 in cash plus the assumption of specified liabilities. ICU Data Systems has developed a patented technology that integrates data from a broad array of hospital bedside devices, such as physiological monitors, ventilators and infusion devices, into a single bedside display for comparison, data management and storage. The patent underlying the technology is licensed by us from the University of Florida College of Medicine and Engineering and expires in 2023. The data integration technology allows customized presentation of data from various bedside devices for comparison on the same display and on the same timeline. The device can also calculate and display derived parameters, or calculated parameters based on the combination of two or more discrete parameters. In addition, device can provide user-defined, automated event marks and alerts. All resulting information can be stored for inclusion in the patient record and clinical research.

We plan to further develop and launch our newly-acquired data integration technology as a stand-alone device in mid-2009. The INVOS System is one of many devices whose data can be integrated into the stand-alone device. To support the addition of the derived parameter features to the system, we will pursue a new FDA 510(k) clearance in 2009. In addition, we expect to invest to combine the ICU Data Systems and INVOS System technologies in a single product for launch expected in the second half of 2010. We also plan to pursue a new FDA 510(k) clearance for this integrated device in 2010.

Upon our acquisition of ICU Data Systems, Inc.'s assets in November 2008, the purchase price was allocated among the net tangible assets, other identifiable intangible assets and goodwill, as required by the relevant accounting standards. The value assigned to the identified intangible asset was based on a valuation model that included estimating the future cash flows of the technology and discounting the net cash flows back to their present value using an appropriate risk-adjusted rate of return (discount rate). See Note 2. The discount rate used was determined at the time of the acquisition in accordance with accepted valuation methods. Our assessment of the estimated fair value included making assumptions about the expected net revenues and operating income related to the acquired technology in future years, making allowance for the uncertainties regarding, among other things, the time and cost associated with the further advancement of the design and performance of the technology to ready it for market launch, the rate of adoption of the technology once it is launched into the marketplace, and the potential for competition related to the launched technology.

Goodwill represents the amount by which the purchase price of the acquired business exceeds the estimated fair value of the net tangible and separately identifiable intangible assets of the acquired business, in addition to transaction costs recorded at cost. Goodwill is not amortized, but is tested at least annually for impairment. The technology acquisition costs intangible asset has an estimated useful life of 20 years, based on several patents related to the technology, and will be amortized on a straight-line basis over the estimated useful life. Intangible assets and goodwill are reviewed annually for impairment at the end of our fiscal year, and whenever events or changes in circumstances indicate that the carrying value of the asset may not be recovered. The company evaluates impairment by comparing the fair value of the intangible asset, determined using a cash flow method, with its carrying value. No amortization expense was recorded related to the technology acquisition costs intangible asset for 2008 because the transaction closed in November 2008. As of November 30, 2008, the carrying value of the technology acquisition costs intangible asset was $246,318, and the carrying value of the goodwill was $1,679,713.

9. Major Customers and Foreign Sales

Covidien, formerly Tyco Healthcare, our international distributor in Europe, the Middle East, South Africa and Canada for our INVOS System, accounted for 14 percent of net revenues for the fiscal year ended November 30, 2008, 13 percent of net revenues for the fiscal year ended November 30, 2007 and 15 percent of net revenues for the fiscal year ended November 30, 2006.

Additionally, foreign net revenues for the fiscal year ended November 30, 2008 were $9,420,472, for the fiscal year ended November 30, 2007 were $7,024,902, and for the fiscal year ended November 30, 2006 were $5,424,536.

10. Segment Information

We operate our business in one reportable segment, the development, manufacture and marketing of medical devices. Our products have similar characteristics, customers, distribution and marketing strategies, and are subject to similar regulatory requirements. In making operating and strategic decisions, our management evaluates net revenues based on the worldwide net revenues of our products, and also profitability on an enterprise-wide basis due to shared costs. Approximately 100 percent of our net revenues in fiscal 2008 and 2007 were derived from our INVOS System product line, compared to 99 percent of our net revenues in fiscal 2006.

QUARTERLY INFORMATION (unaudited)

The following is a summary of our quarterly operating results for the fiscal years ended November 30, 2008 and 2007:

	Quarter			
	First	Second	Third	Fourth
Year Ended November 30, 2008				
Net revenues	$8,693,274	$12,740,063	$12,367,988	$13,654,292
Gross margin	7,676,450	11,060,807	10,650,130	11,818,974
Net income	1,028,429	3,052,252	3,046,454	3,319,112
Net income per common share - basic	$ 0.08	$ 0.23	$ 0.25	$ 0.28
Net income per common share - diluted	$ 0.07	$ 0.21	$ 0.23	$ 0.25
Year Ended November 30, 2007				
Net revenues	$8,024,872	$9,122,178	$10,163,509	$11,275,273
Gross margin	7,023,149	8,075,061	8,825,091	9,936,385
Net income	1,683,551	2,406,456	2,792,689	2,799,585
Net income per common share - basic	$ 0.13	$ 0.18	$ 0.21	$ 0.21
Net income per common share - diluted	$ 0.12	$ 0.17	$ 0.19	$ 0.19

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Our management has evaluated, with the participation of our principal executive and principal financial officers, the effectiveness of our disclosure controls and procedures and of our internal control over financial reporting, both as of November 30, 2008. Based on their evaluation, our principal executive and principal financial officers have concluded that these controls and procedures are effective as of November 30, 2008. See Item 8 of this report for Management's Report on Internal Control Over Financial Reporting and our Independent Registered Public Accounting Firm's Report, which are incorporated in this Item 9A by reference. There was no change in our internal control over financial reporting identified in connection with such evaluation that occurred during our fourth fiscal quarter ended November 30, 2008 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Disclosure controls and procedures are our controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Internal control over financial reporting is a process designed by, or under the supervision of, our principal executive and principal financial officers, and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that: (1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect our transactions and dispositions of assets, (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors, and (3) and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item 10 regarding our executive officers is included in the Supplemental Item in Part I of this report, and is incorporated in this Item 10 by reference. The information required by this Item 10 regarding our directors will be set forth under the captions "Election of Directors" and "Biographical Information" in our Proxy Statement in connection with the 2009 Annual Meeting of Shareholders scheduled to be held April 23, 2009, and is incorporated in this Item 10 by reference. The information required by this Item 10 concerning compliance with Section 16(a) of the Securities Exchange Act of 1934 will be set forth under the caption "Section 16(a) Beneficial Ownership Reporting Compliance" in our Proxy Statement in connection with the 2009 Annual Meeting of Shareholders scheduled to be held April 23, 2009, and is incorporated in this Item 10 by reference.

The information required by this Item 10 concerning our Code of Business Conduct and Ethics will be set forth under the caption "Code of Business Conduct and Ethics" in our Proxy Statement in connection with the 2009 Annual Meeting of Shareholders scheduled to be held April 23, 2009, and is incorporated in this Item 10 by reference. The information required by this Item 10 concerning the procedures by which security holders may recommend nominees to our board of directors will be set forth under the caption "Corporate Governance – Nominating Committee" in our Proxy Statement in connection with the 2009 Annual Meeting of Shareholders scheduled to be held April 23, 2009, and is incorporated in this Item 10 by reference. The information required by this Item 10 concerning our Audit Committee and our Audit Committee financial experts will be set forth under the caption "Corporate Governance – Audit Committee" and "Corporate Governance – Audit Committee Financial Expert" in our Proxy Statement in connection with the 2009 Annual Meeting of Shareholders scheduled to be held April 23, 2009, and is incorporated in this Item 10 by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item 11 concerning executive compensation will be set forth under the caption "Executive Compensation" in our Proxy Statement in connection with the 2009 Annual Meeting of Shareholders scheduled to be held April 23, 2009, and is incorporated in this Item 11 by reference. The information required by this Item 11 concerning Compensation Committee Interlocks and Insider Participation will be set forth under the caption "Corporate Governance – Compensation Committee Interlocks and Insider Participation" in our Proxy Statement in connection with the 2009 Annual Meeting of Shareholders scheduled to be held April 23, 2009, and is incorporated in this Item 11 by reference. The information required by this Item 11 concerning the Compensation Committee Report will be set forth under the caption "Corporate Governance – Compensation Committee Report" in our Proxy Statement in connection with the 2009 Annual Meeting of Shareholders scheduled to be held April 23, 2009, and is incorporated in this Item 11 by reference.

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

The information required by this Item 12 concerning security ownership of certain beneficial owners and management will be set forth under the captions "Voting Securities and Principal Holders – Principal Holders of Our Voting Securities" and "Election of Directors" in our Proxy Statement in connection with the 2009 Annual Meeting of Shareholders scheduled to be held April 23, 2009, and is incorporated in this Item 12 by reference. The equity compensation plan information required by this Item 12 will be set forth under the caption "Equity Compensation Plan Information" in our Proxy Statement in connection with the 2009 Annual Meeting of Shareholders scheduled to be held April 23, 2009, and is incorporated in this Item 12 by reference.

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

The information required by this Item 13 concerning transactions with related persons, if any, will be set forth under the caption "Certain Transactions" or "Compensation Committee Interlocks and Insider Participation" and under the caption "Review, Approval or Ratification of Transactions with Related Persons" in our Proxy Statement in connection with the 2009 Annual Meeting of Shareholders scheduled to be held April 23, 2009, and is incorporated in this Item 13 by reference. The information required by this Item 13 concerning director

independence will be set forth under the caption "Corporate Governance – Independence" in our Proxy Statement in connection with the 2009 Annual Meeting of Shareholders scheduled to be held April 23, 2009, and is incorporated in this Item 13 by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item 14 concerning principal accountant fees and services will be set forth under the caption "Independent Accountants" in our Proxy Statement in connection with the 2009 Annual Meeting of Shareholders scheduled to be held April 23, 2009, and is incorporated in this Item 14 by reference.

PART IV

ITEM 15 EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) (1) Financial Statements

Our financial statements for the following years are included in response to Item 8 of this report:

Report of Independent Registered Public Accounting Firm
Balance Sheets - November 30, 2008 and 2007
Statements of Operations - For Each of the Three Years in the Period Ended November 30, 2008
Statements of Shareholders' Equity - For Each of the Three Years in the Period Ended November 30, 2008
Statements of Cash Flows - For Each of the Three Years in the Period Ended November 30, 2008
Notes to Financial Statements

(2) Financial Statement Schedules

None.

(3) Exhibits

The Exhibits to this report are as set forth in the "Exhibit Index" on pages 75 to 77 of this report. Each management contract or compensatory plan or arrangement filed as an exhibit to this report is identified in the "Index to Exhibits" with an asterisk before the exhibit number.

SIGNATURES

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

Date: February 9, 2009

Somanetics Corporation
By: /s/ Bruce J. Barrett
Bruce J. Barrett
President & Chief Executive Officer

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

Signature	Title	Date
/s/ BRUCE J. BARRETT **Bruce J. Barrett**	President and Chief Executive Officer and a Director (Principal Executive Officer)	February 9, 2009
/s/ WILLIAM M. IACONA **William M. Iacona**	Vice President and Chief Financial Officer, Controller, and Treasurer (Principal Financial Officer and Principal Accounting Officer)	February 10, 2009
/s/ JAMES I. AUSMAN **James I. Ausman, M.D., Ph.D.**	Director	February 10, 2009
/s/ DANIEL S. FOLLIS **Daniel S. Follis**	Director	February 11, 2009
/s/ ROBERT R. HENRY **Robert R. Henry**	Director	February 9, 2009
/s/ JOHN P. JUMPER **John P. Jumper**	Director	February 10, 2009
/s/ RICHARD R. SORENSEN **Richard R. Sorensen**	Director	February 9, 2009

EXHIBIT INDEX

Exhibit	Description
3(i)	Restated Articles of Incorporation of Somanetics Corporation, incorporated by reference to Exhibit 3(i) to the Company's Quarterly Report on Form 10-Q for the quarter ended February 28, 1998.
3(ii)	Amended and Restated Bylaws of Somanetics Corporation, incorporated by reference to Exhibit 3(ii) to the Company's Current Report on Form 8-K dated November 2, 2007 and filed November 5, 2007.
10.1	Lease Agreement, dated September 10, 1991, between Somanetics Corporation and WS Development Company, incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended August 31, 1991.
10.2	Extension of Lease, between Somanetics Corporation and WS Development Company, dated July 22, 1994, incorporated by reference to Exhibit 10.11 to the Company's Quarterly Report on Form 10-Q for the quarter ended August 31, 1994.
10.3	Change in ownership of Lease Agreement for 1653 E. Maple Road, Troy, MI 48083, dated September 12, 1994, between Somanetics Corporation and First Industrial, L.P., incorporated by reference to Exhibit 10.12 to the Company's Quarterly Report on Form 10-Q for the quarter ended August 31, 1994.
10.4	Second Addendum, between Somanetics Corporation and First Industrial Mortgage Partnership, L.P., dated April 14, 1997, incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended May 31, 1997.
10.5	Third Amendment, between Somanetics Corporation and First Industrial Mortgage Partnership, L.P., dated April 23, 1999, incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended May 31, 1999.
10.6	Fourth Amendment, between Somanetics Corporation and First Industrial Mortgage Partnership, L.P., dated April 13, 2000, incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended May 31, 2000.
10.7	Fifth Amendment, between Somanetics Corporation and First Industrial Mortgage Partnership, L.P., dated January 22, 2003, incorporated by reference to Exhibit 10.7 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 2002.
10.8	Sixth Amendment, between Somanetics Corporation and First Industrial Mortgage Partnership, L.P., dated April 21, 2004, incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended May 31, 2004.
*10.9	Somanetics Corporation Amended and Restated 1991 Incentive Stock Option Plan, incorporated by reference to Exhibit 10.5 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 1991.
*10.10	Fourth Amendment to Somanetics Corporation 1991 Incentive Stock Option Plan, incorporated by reference to Exhibit 10.7 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 1992.
*10.11	Amended and Restated Fifth Amendment to Somanetics Corporation 1991 Incentive Stock Option Plan, incorporated by reference to Exhibit 10.10 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 1995.
*10.12	Somanetics Corporation 1997 Stock Option Plan, incorporated by reference to Exhibit 10.9 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 1996.
*10.13	First Amendment to Somanetics Corporation 1997 Stock Option Plan, incorporated by reference to Exhibit 10.11 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 1997.
*10.14	Second Amendment to Somanetics Corporation 1997 Stock Option Plan, incorporated by reference to Exhibit 10.12 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 1998.

EXHIBIT INDEX

Exhibit	Description
*10.15	Third Amendment to Somanetics Corporation 1997 Stock Option Plan, incorporated by reference to Exhibit 10.14 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 1999.
*10.16	Fourth Amendment to Somanetics Corporation 1997 Stock Option Plan, incorporated by reference to Exhibit 10.16 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 2000.
*10.17	Fifth Amendment to Somanetics Corporation 1997 Stock Option Plan, incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended February 28, 2002.
*10.18	Sixth Amendment to Somanetics Corporation 1997 Stock Option Plan, incorporated by reference to Exhibit 10.18 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 2002.
*10.19	Somanetics Corporation 2005 Stock Incentive Plan, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, dated February 24, 2005
*10.20	First Amendment to Somanetics Corporation 2005 Stock Incentive Plan, incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K, dated January 17, 2007 and filed January 23, 2007.
*10.21	Somanetics Corporation 2008 Executive Officer Incentive Compensation Plan, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, dated December 17, 2007 and filed December 18, 2007.
*10.22	Somanetics Corporation 2009 Executive Officer Incentive Compensation Plan, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, dated January 21, 2009 and filed January 23, 2009.
*10.23	Amended and Restated Employment Agreement between Somanetics Corporation and Bruce J. Barrett, dated as of June 17, 2008, incorporated by reference to Exhibit 99.3 to the Company's Current Report on Form 8-K, dated June 17, 2008 and filed June 23, 2008.
*10.24	Amended and Restated Employment Agreement between Somanetics Corporation and Dominic J. Spadafore, dated as of June 17, 2008, incorporated by reference to Exhibit 99.2 to the Company's Current Report on Form 8-K, dated June 17, 2008 and filed June 23, 2008.
*10.25	Form of Amended and Restated Change in Control Agreement, between Somanetics Corporation and executive officers, dated as of June 17, 2008, incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K, dated June 17, 2008 and filed June 23, 2008.
*10.26	Form of Director Stock Option Agreement, incorporated by reference to Exhibit 10.30 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 2004.
*10.27	Form of Officer Non-Qualified Stock Option Agreement, incorporated by reference to Exhibit 10.31 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 2004.
*10.28	Form of Employee Non-Qualified Stock Option Agreement, incorporated by reference to Exhibit 10.32 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 2004.
*10.29	Form of Incentive Stock Option Agreement, incorporated by reference to Exhibit 10.33 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 2004.
*10.30	Form of 2005 Stock Incentive Plan Incentive Stock Option Agreement, incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended May 31, 2005.
*10.31	Form of 2005 Stock Incentive Plan Officer Non-Qualified Stock Option Agreement, incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended May 31, 2005.
*10.32	Form of 2005 Stock Incentive Plan Non-Officer Non-Qualified Stock Option Agreement, incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended May 31, 2005.
*10.33	Form of 2005 Stock Incentive Plan Director Stock Option Agreement, incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended May 31, 2005.

EXHIBIT INDEX

Exhibit	Description
*10.34	Form of Restricted Stock Agreement, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, dated June 29, 2006 and filed July 5, 2006.
*10.35	Stock Option Agreement, dated as of August 1, 2002, between Somanetics Corporation and Dominic J. Spadafore, incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended August 31, 2002.
*10.36	Summary of Outside Director Compensation, incorporated by reference to Item 1.01 to the Company's Current Report on Form 8-K dated June 29, 2006 and filed July 5, 2006.
10.37	Contract Development Agreement, dated as of February 6, 2009 among Somanetics Corporation, Shirley Research Corporation, Hugh F. Stoddart, and Hugh A. Stoddart, incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K, dated February 6, 2009 and filed February 10, 2009.
10.38	Current Form of Somanetics Corporation Confidentiality Agreement used for testing hospitals and clinics, incorporated by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K for the fiscal year ended November 30, 1992.
10.39	Current Form of Somanetics Corporation Confidentiality Agreement used for the Company's employees and agents, incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended August 31, 1992.
14.1	Somanetics Corporation Code of Business Conduct and Ethics, as re-adopted December 18, 2008.
23.1	Consent of Deloitte & Touche LLP.
31.1	Certifications of Chief Executive Officer Pursuant to Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certifications of Chief Financial Officer Pursuant to Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certifications of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 33-41453, 33-48646, 33-77080, 333-31753, 333-59547, 333-80071, 333-36836, 333-62574, 333-92368, 333-107875, 333-125392, and 333-144768 on Form S-8 of our report dated February 9, 2009, relating to the financial statements of Somanetics Corporation, and the effectiveness of Somanetics Corporation's internal control over financial reporting, appearing in this Annual Report on Form 10-K of Somanetics Corporation for the year ended November 30, 2008.

/s/ DELOITTE & TOUCHE LLP

Detroit, Michigan
February 9, 2009

Exhibit 31.1

CERTIFICATIONS

I, Bruce J. Barrett, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended November 30, 2008 of Somanetics Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 9, 2009

/s/ Bruce J. Barrett
Bruce J. Barrett, President and
Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, William M. Iacona, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended November 30, 2008 of Somanetics Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 10, 2009

/s/ William M. Iacona
William M. Iacona
Vice President and Chief Financial Officer, Controller, and Treasurer

Exhibit 32.1

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Somanetics Corporation (the "Company") on Form 10-K for the year ended November 30, 2008 as filed with the Securities and Exchange Commission on the date hereof (the "Periodic Report"), we, Bruce J. Barrett, President and Chief Executive Officer of the Company, and William M. Iacona, Vice President and Chief Financial Officer, Controller and Treasurer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. the Periodic Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. the information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: February 9, 2009

/s/ Bruce J. Barrett
Bruce J. Barrett, President and Chief Executive Officer

Dated: February 10, 2009

/s/ William M. Iacona
William M. Iacona, Vice President and Chief Financial Officer, Controller and Treasurer

BOARD OF DIRECTORS

BRUCE J. BARRETT
President and Chief Executive Officer,
Somanetics Corporation

JAMES I. AUSMAN, MD, PHD
Clinical Professor of Neurosurgery,
University of California at Los Angeles
Editor, Surgical Neurology
Chief Executive Officer, Waymaster Corporation, television production company
President and Chief Executive Officer, Future Healthcare Strategies, healthcare consulting company

DANIEL S. FOLLIS
President, Verschuren & Follis, Inc., investment fund management
President, Follis Corporation, sales and marketing company

ROBERT R. HENRY
President, Robert R. Henry & Co., Inc., financial consulting and investment firm

JOHN P. JUMPER
General, United States Air Force (Retired)
Independent Consultant

RICHARD R. SORENSEN
Treasurer and Chief Financial Officer, U.S. Health Holdings, Ltd. and its wholly-owned subsidiaries, US Health and Life Insurance Company, group health and life insurance company, and Automated Benefit Services, Inc., third party administrator

OFFICERS

BRUCE J. BARRETT
President and Chief Executive Officer

WILLIAM M. IACONA
Vice President and Chief Financial Officer, Controller and Treasurer

DOMINIC J. SPADAFORE
Senior Vice President, U.S. Sales and Marketing

MARY ANN VICTOR
Vice President and Chief Administrative Officer and Secretary

ARIK A. ANDERSON
Senior Vice President, R & D and Operations

MICHAEL D. WIDER, PHD
Vice President, Technology and Market Development

RONALD A. WIDMAN
Vice President, Medical Affairs

PAMELA A. WINTERS
Vice President, Quality Assurance

CORPORATE INFORMATION

SOMANETICS' COMMON SHARES:
Somanetics' common shares trade on The NASDAQ Global Market under the symbol SMTS.

REGISTRAR AND TRANSFER AGENT:
American Stock Transfer & Trust Company
59 Maiden Lane
New York, NY 10038

AUDITORS:
Deloitte & Touche, LLP
Detroit, MI

GENERAL COUNSEL:
Honigman Miller Schwartz and Cohn LLP
Detroit, MI

FORM 10-K:
Additional copies of Somanetics' Annual Report to the Securities and Exchange Commission on Form 10-K for the fiscal year ended November 30, 2008 are available without charge to shareholders, and may be obtained by contacting Somanetics' Investor Relations Department or by visiting our web site at www.somanetics.com.

INVESTOR RELATIONS:
1653 East Maple Road
Troy, MI 48083-4208
(248) 689-3050 ext. 5803

CORPORATE WEB SITE: www.somanetics.com

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NASDAQ: SMTS

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