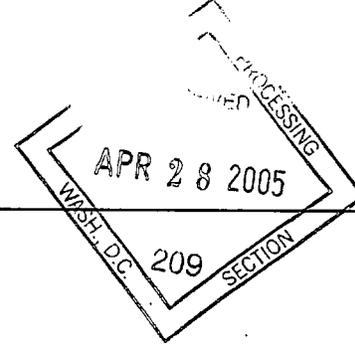


ARLS



Dear Stockholders:

There is a Chinese proverb that says "the journey of a thousand miles begins with a single step."

Nearly 18 years ago, Aspect Medical Systems took the first step in a journey toward what many said was impossible: making brain monitoring simple and clinically effective so that it could be used routinely to improve patient care. Achieving this goal has been a long road requiring significant investments in market development, human resources and intellectual capital. Today, I am happy to report that in 2004 we achieved our first year of profitability and gained great momentum for our continuing journey toward widespread clinical adoption of our technology. This was the year that we strengthened our position as a global market leader in brain monitoring. The publication of landmark research related to anesthesia safety, success with our strategic partners, our continued technological innovation, and growing acceptance of our technology across a variety of hospital environments combined to increase demand for BIS™ technology and earn Aspect recognition from *Medical Device & Diagnostic Industry* magazine as the small company "manufacturer of the year." These accomplishments were made possible by the strength of our partnerships, committed customers, the support of stockholders, and most importantly, dedicated employees who share a common vision: *to improve people's lives by helping healthcare professionals deliver the best possible patient care through innovative brain monitoring technologies.*

ANESTHESIA RESEARCH AND LEADERSHIP

In 2004, the publication of groundbreaking research on topics related to anesthesia and patient safety captured the attention of the anesthesia profession and the broader medical community and led to greater acceptance and demand for BIS solutions.

Intraoperative awareness, a complication that occurs when patients do not receive enough anesthesia to remain unconscious, has emerged as a serious patient safety issue in anesthesia management. Three major clinical trials, all published in prestigious peer-reviewed medical journals within the past year, have demonstrated that:

- 20,000 – 40,000 people experience unexpected waking during surgery each year
- This experience can be traumatic for patients and providers
- BIS technology can help clinicians reduce the risk of this adverse event by approximately 80%

Aspect's BIS system remains the only technology that has been proven in clinical studies to reduce the risk of awareness.

The anesthesia profession is taking action to understand these new research findings and define the implications on medical practice. The American Society of Anesthesiologists (ASA) has appointed a Practice Parameter Task Force to evaluate the available awareness research and develop a Practice Parameter document that will discuss the role of brain monitoring in addressing anesthesia awareness. The task force met during the annual meeting of the ASA in the fall of 2004 and is meeting throughout 2005 to prepare a final Practice Parameter document that is expected to be released at the fall 2005 ASA annual meeting.

The broader medical community is responding to these findings as well. In late 2004, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) issued a "Sentinel Event Alert" aimed at educating the medical community about the problem of



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anesthesia awareness and potential for patient harm. The alert recommended that healthcare organizations that perform general anesthesia develop and implement a policy that specifically addresses anesthesia awareness. The alert also noted that, in its review of the BIS monitor, the U.S. Food and Drug Administration determined that "use of BIS monitoring to help guide anesthetic administration may be associated with the reduction of the incidence of awareness with recall in adults during general anesthesia and sedation." We believe that the implications of the alert are far-reaching given that JCAHO is the nation's predominant standards-setting and accrediting body in healthcare that evaluates more than 15,000 healthcare organizations and programs.

Compelling new research has also shown a possible association between deep anesthesia levels, as measured by BIS, and increased risk of post-operative mortality. In January 2005, a study revealing this finding was published in the medical journal, *Anesthesia & Analgesia*. Even though the mechanisms involved with this association are still unclear, such a finding could have significant implications for patient safety and for BIS monitoring if confirmed through further investigation. In the fall of 2004, the Anesthesia Patient Safety Foundation (APSF) convened a multidisciplinary panel of medical experts to evaluate this and other research and determine the direction for future investigations. The panel meeting underscored that anesthesia and surgery may have a more significant and long-term impact on patients than previously realized.

STRATEGIC RELATIONSHIPS AND TECHNOLOGICAL INNOVATION

Established partnerships with leading patient monitoring manufacturers and continued enhancements of BIS technology were other key factors driving success in 2004. Strategic relationships and technological innovation enabled Aspect to make BIS technology even more accessible to clinicians throughout the continuum of healthcare environments – from the operating room and intensive care unit, to ambulatory surgery centers and procedural sedation locations. We introduced the BISx™ to the market, gaining access to new patient monitoring platforms and environments. This device contains all of the processing technology required to obtain BIS information within a small piece of hardware that interfaces with the majority of patient monitoring platforms through a "plug and play" connection. BIS technology remains the only consciousness monitoring solution that offers customers widespread availability and compatibility through licensing agreements with leading manufacturers of patient monitoring systems, including Datascope, Datex-Ohmeda, Dixtal, Draeger Medical, GE Healthcare, Nihon Kohden, Philips Medical and Spacelabs Medical.

IMPROVED PERFORMANCE AND GROWTH

The momentum driven by these developments was reflected in Aspect's financial performance in 2004. Continued strong increases in our installed base of monitors and modules provided for rapid growth in recurring sensor revenues. This revenue growth coupled with disciplined expense management enabled Aspect to record the first annual net profit in our history.

- Worldwide revenue increased by 26%
- Worldwide sensor revenue grew by 30%
- Operating expenses increased by 7%
- Worldwide installed base of BIS systems grew 24% to more than 24,100 monitors and modules
- Net income of \$.01 per share compared to a net loss of \$.34 per share in 2003

LOOKING AHEAD

The science of brain monitoring is only in its infancy and is likely to have future applications that we cannot even envision today. In the not too distant future, we believe that Aspect's technology could play an important role in the routine detection, diagnosis and treatment of a variety of neurological conditions.

For example, Aspect's brain monitoring technology has shown promise in clinical research seeking to improve the management of depression. One of the challenges for those who treat this common affliction has been identifying the right pharmacological solution for each individual patient. All patients do not respond similarly to the various antidepressants on the market, and it often takes six to eight weeks to determine if a patient will benefit from a particular medication. In 2004, clinical studies undertaken in collaboration with Massachusetts General Hospital and Harvard Medical School showed that Aspect's brain monitoring technology was able to predict with high accuracy after one week of treatment whether a patient would respond to a particular antidepressant. Similarly, Aspect's brain monitoring expertise is being used to assess how antidepressants, as opposed to placebos, affect the brain. We are currently engaged in early stage clinical trials with leading pharmaceutical manufacturers, including Eli Lilly and others, to identify the trial subjects who are most responsive to depression treatments. This could enable researchers to discover the most promising antidepressant compounds with fewer experimental subjects, and possibly reduce development costs and accelerate time-to-market.

Finally, we are currently conducting early stage clinical trials to explore the potential use of Aspect's technology as an early-warning system for cognitive disorders such as Alzheimer's disease. Early detection of such debilitating neurological disorders could have a profound impact on management of the disease and help prepare families before symptoms appear.

Looking forward, Aspect will continue to be guided by our vision, to seek new opportunities to reinforce our industry-leading position and to expand our knowledge-base, technology and partnerships – all while striving to build shareholder value. Our vision has guided us through the trials and triumphs of our first 18 years, and I'm confident that it will continue to guide us to serve our patients, providers and stockholders well in the future.

Sincerely,



Nassib G. Chamoun
President, CEO and Founder

Financial Information

SELECTED CONSOLIDATED FINANCIAL DATA

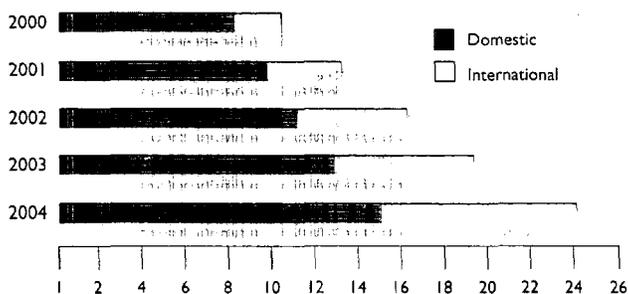
CONSOLIDATED STATEMENTS OF OPERATIONS DATA *(in thousands, except per share data):*

YEAR ENDED DECEMBER 31,	2004	2003	2002	2001	2000
Revenue	\$ 55,564	\$ 44,091	\$ 39,776	\$ 35,829	\$ 36,024
Gross profit margin	42,572	33,193	27,961	23,383	24,745
Gross profit margin percentage	76.6%	75.3%	70.3%	65.3%	68.7%
Operating expenses:					
Research & development	7,470	7,287	7,827	7,467	5,713
Sales & marketing	26,776	25,321	28,449	28,396	21,979
General & administrative	8,946	7,833	7,942	7,803	6,390
Total operating expenses	43,192	40,441	44,218	43,666	34,082
Loss from operations	(620)	(7,248)	(16,257)	(20,283)	(9,337)
Interest income, net	923	725	956	2,564	3,993
Net income (loss)	\$ 303	\$ (6,523)	\$ (15,301)	\$ (17,719)	\$ (5,344)
Net income (loss) per share:					
Basic	\$ 0.02	\$ (0.34)	\$ (0.83)	\$ (1.01)	\$ (0.34)
Diluted	\$ 0.01	\$ (0.34)	\$ (0.83)	\$ (1.01)	\$ (0.34)
Weighted average shares used in computing net income (loss) per share:					
Basic	20,142	19,413	18,450	17,614	15,755
Diluted	22,286	19,413	18,450	17,614	15,755

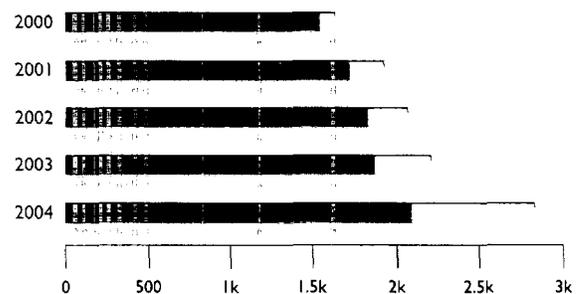
CONSOLIDATED BALANCE SHEET DATA *(in thousands):*

AS OF DECEMBER 31,	2004	2003	2002	2001	2000
Cash, cash equivalents, restricted cash and short-term investments	\$ 32,295	\$ 31,162	\$ 36,865	\$ 41,458	\$ 58,489
Working capital	34,224	30,680	36,734	41,266	58,455
Total assets	61,690	47,740	54,480	63,369	79,411
Long-term debt	186	525	1,015	964	2,617
Total stockholders' equity	45,586	30,968	36,797	48,056	63,974

Monitor and Module Installed Base *(in thousands)*



Sensor Shipments *(in thousands)*



Board of Directors

Nassib G. Chamoun
President, Chief Executive Officer,
and Founder

J. Breckenridge Eagle
Chairman of the Board of Directors

Boudewijn Bollen
President of International Operations

David W. Feigal, M.D.

Edwin M. Kania, Jr.
Senior Managing Director and Chairman
Insight Ventures

James J. Mahoney, Jr.

Richard J. Meekia
President and Chief Executive Officer
Type Healthcare Group

Donald R. Sranski, M.D.
Professor of Anesthesia
Stanford University

Executive Officers

Nassib G. Chamoun
President, Chief Executive Officer,
and Founder

J. Breckenridge Eagle
Chairman of the Board of Directors

Richard Falvey
Vice President,
and Financial Officer and Secretary

Boudewijn Bollen
President of International Operations

Jim Coakidge
Vice President of Manufacturing Operations

Eric Davidson
Vice President of Engineering

Boris H. Doolin
Vice President and General
Manager of Neuroscience

William Floyd
Vice President of Sales and Marketing

Scott D. Kelly, M.D.
Vice President and Medical Director

Paul Manberg, Ph.D.
Vice President of Clinical,
Regulatory and Quality Assurance

Investor Relations

J. Neal Armstrong
Vice President of Investor Relations

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312.266.7800

Corporate Counsel

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Boston, Massachusetts 02109
617.526.6000

Auditors

PricewaterhouseCoopers
PwC & Young LLP
200 Clarendon Street
Boston, Massachusetts 02116
617.266.2000

Transfer Agent

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P.O. Box 219045
Kansas City, Missouri 64121-9045
Stockholder Inquiries 816.843.4299
URL: <http://www.equiserve.com>

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f: 617.559.7400
e: bis_info@aspectms.com

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International B.V.
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The Netherlands
t: 31.30.662.9140
f: 31.30.662.9150
e: amsim@aspectms.com

Form 10-K

The Company's Annual Report on
Form 10-K, as filed with the Securities
and Exchange Commission for the
year ended December 31, 2004,
is available free of charge upon written
request to Aspect Medical Systems,
the Investor Relations Department,
111 Needham Street, Newton,
Massachusetts 02464

CORPORATE INFORMATION**Annual Meeting of Stockholders**

All stockholders are welcome to attend our annual
meeting, which will be held at 9:00 am on Wednesday,
May 25, 2005, at Aspect Medical Systems, Inc., 141
Needham Street, Newton, Massachusetts. We look
forward to meeting our stockholders and answering
any questions you may have at the meeting.

Forward-Looking Statements

Certain statements made in this Annual Report to
stockholders are forward-looking statements that are
subject to risks and uncertainties. There are a number
of factors that could cause the Company's future
results of operations to differ
materially from such statements, including without
limitation those set forth under the heading, "Factors
Affecting Future Operating Results" in the Company's
Annual Report on Form 10-K for the fiscal year
ended December 31, 2004, which is filed with the
Securities and Exchange Commission. These
statements should not be relied upon as representing
the Company's expectations or beliefs as of any date
immediately to the date of the Annual Report.



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www.aspectmedical.com

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

**For Annual and Transaction Reports Pursuant to Sections 13 or 15(d)
of the Securities Exchange Act of 1934**

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

For the fiscal year ended December 31, 2004

For the transition period from _____ to _____

Commission file number: 0-24663

Aspect Medical Systems, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware

*(State or Other Jurisdiction of
Incorporation or Organization)*

04-2985553

*(I.R.S. Employer
Identification No.)*

**141 Needham Street
Newton, Massachusetts**

(Address of Principal Executive Offices)

02464-1505

(Zip Code)

(617) 559-7000

Registrant's telephone number, including area code

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

Securities registered Pursuant to Section 12(g) of the Act:

Common Stock, \$0.01 Par Value
(Title Of Class)

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 an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes No

The aggregate market value of the voting stock held by non-affiliates of the registrant as of July 2, 2004 (based on the closing price as quoted by the Nasdaq National Market as of such date) was \$254,014,822. The registrant had 20,922,737 shares of Common Stock, \$0.01 par value per share, outstanding as of March 1, 2005.

DOCUMENTS INCORPORATED BY REFERENCE

The registrant intends to file a definitive proxy statement pursuant to Regulation 14A within 120 days of the end of the fiscal year ended December 31, 2004. Portions of such proxy statement are incorporated by reference into Part III of this Form 10-K.

PART I

Item 1. Business.

Overview

Aspect Medical Systems, Inc. was incorporated as a Delaware corporation in 1987. We develop, manufacture and market an anesthesia monitoring system that we call the BIS® system. The BIS system is based on our patented core technology, the Bispectral Index, which we refer to as the BIS index. The BIS system provides information that allows clinicians to better assess and manage a patient's level of consciousness in the operating room and intensive care settings and administer the precise amount of anesthesia needed by each patient. We developed the BIS system over 10 years, and it is the subject of 20 issued United States patents and eight pending United States patent applications. Our proprietary BIS system includes our BIS monitor, BIS Module Kit or BISx system, which allows original equipment manufacturers to incorporate the BIS index into their monitoring products, and our disposable BIS Sensors. In January 2005, we introduced our semi-reusable sensor product in the international market, excluding Japan. We collectively refer to our group of sensor products as BIS Sensors.

Our latest generation of stand-alone monitor, the A-2000® BIS Monitor, was cleared for marketing by the United States Food and Drug Administration, or the FDA, in February 1998. Our latest version of the BIS system, the BIS XP system, was cleared for marketing by the FDA in June 2001. The BIS XP system offers enhanced performance capabilities and expanded benefits as compared to the previous version of our BIS system, enabling more precise measurement of brain activity to assess the level of consciousness. The BIS XP system is designed to detect and filter interference from muscle artifact and is resistant to interference from electrocautery devices. Additionally, it is able to provide enhanced detection of near suppression, a brain wave pattern occasionally observed during deep anesthesia and cardiac cases. In addition to our A-2000 BIS Monitor, we offer original equipment manufacturers our BIS Module Kit for integration into equipment sold by the original equipment manufacturers. Our BISx system, which was cleared for marketing by the FDA in February 2004, is our latest BIS monitoring system for integration into the equipment sold by original equipment manufacturers. The BISx system provides the BIS XP functionality in a single device the approximate size of a hockey puck, simplifying the incorporation of the BIS XP system into third-party patient monitoring systems.

As of December 31, 2004, the worldwide installed base of BIS monitors and original equipment manufacturer products was approximately 24,000 units. We estimate that BIS technology is installed in approximately 36% of all domestic operating rooms, and is available in more than 160 countries. We estimate that more than 10.4 million patients worldwide have been monitored using the BIS index during surgery.

Clinical trials and routine clinical use of the BIS system have shown that patient monitoring with the BIS system can result in:

- a reduction in the amount of anesthetics used,
- faster wake-up from anesthesia,
- less patient time in the operating room and the post-anesthesia care unit following surgery,
- higher rates of outpatients bypassing the post-anesthesia care unit and proceeding to a less costly step-down recovery area directly from the operating room,
- improvements in the quality of recovery, and
- a reduction in the unintentional regaining of consciousness during surgery.

We derive our revenue primarily from sales of BIS monitors, our original equipment manufacturer products (including BIS Module Kits and BISx) and related accessories, which we collectively refer to as Equipment, and sales of BIS Sensors. In 2004, 2003 and 2002, revenue from the sale of Equipment represented approximately 29%, 31% and 33%, respectively, of our revenue, and revenue from the sale of BIS Sensors represented approximately 71%, 69% and 67%, respectively, of our revenue.

We maintain a website with the address www.aspectmedical.com. We are not including the information contained on our website as a part of, or incorporating it by reference into, this Annual Report on Form 10-K. We make available free of charge through our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, and amendments to these reports, as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the Securities and Exchange Commission. We have posted on our website a copy of our Code of Business Conduct and Ethics. In addition, we intend to disclose on our website any amendments to, or waivers from, our code of business conduct and ethics that are required to be publicly disclosed pursuant to the rules of the Securities and Exchange Commission.

The Aspect Solution: Patient Monitoring with the BIS System

We have developed the BIS monitoring system that is based on our proprietary BIS index. Our BIS system is composed of our BIS monitor, BIS Module Kit or BISx system and our BIS Sensors. The BIS Sensors are applied to a patient's forehead to acquire the EEG, a measure of the electrical activity of the brain. The EEG is then analyzed by the BIS monitor, BIS Module Kit or BISx system to produce the BIS index. The BIS index is a numerical index that correlates with levels of consciousness and is displayed as a number ranging between 100, indicating that the patient is awake, and zero, indicating an absence of brain activity. In October 1996, the FDA cleared the BIS index for marketing for use as a direct measure of the effects of anesthetics and sedatives on the brain. In October 2003, the FDA cleared a new indication for use specifying that use of BIS monitoring to help guide anesthetic administration may be associated with the reduction of the incidence of awareness with recall in adults during general anesthesia and sedation.

Products

The following chart summarizes our principal product offerings:

<u>Product</u>	<u>Initial Commercial Shipment</u>	<u>Description</u>
BISx System	2004	BIS monitoring solution that provides the processing technology required to obtain BIS information from a single device the approximate size of a hockey puck. The BISx system is designed to integrate with a wide range of patient monitoring platforms sold by leading monitoring manufacturers.
BIS XP System	2001	Latest version of BIS system offering enhanced performance capabilities and expanded benefits as compared to the previous version of the BIS system, enabling more precise measurement of brain activity to assess the level of consciousness.
BIS Module Kit — 4 Channel Support	2001	Same as standard BIS Module Kit plus 4 channel EEG monitoring capability.
A-2000 BIS Monitor	1998	Small, lightweight, portable third-generation BIS monitor.
BIS Module Kit	1998	Components of BIS monitoring technology that are integrated into equipment sold by original equipment manufacturers.

<u>Product</u>	<u>Initial Commercial Shipment</u>	<u>Description</u>
BIS Extend Sensor	2002	Disposable sensor with electronic memory device for use with A-2000 BIS Monitor, BIS Module Kit and BISx system that was specially designed for patients who are typically monitored for extended periods.
BIS Pediatric Sensor	2001	Disposable sensor with electronic memory device for use with A-2000 BIS Monitor, BIS Module Kit and BISx system that is smaller and easier to apply to children.
BIS Quatro Sensor	2001	Disposable sensor with electronic memory device for use with A-2000 BIS Monitor, BIS Module Kit and BISx system that offers enhanced performance in deep anesthetic states and enhanced resistance to interference from noise sources.
BIS Sensor Plus	2001	Second-generation disposable sensor for use with the A-2000 BIS Monitor and BIS Module Kit.
BIS Standard Sensor	1997	Disposable sensor for use with A-2000 BIS Monitor, A-1050 EEG Monitor with BIS and BIS Module Kit

BISx System

The BISx system is our latest original equipment manufacturer BIS monitoring solution that provides the processing technology required to obtain BIS information from a single device the approximate size of a hockey puck. The BISx system is designed to integrate with a wide range of patient monitoring platforms sold by leading monitoring manufacturers. BISx simplifies the incorporation of BIS technology into our partners' monitoring systems and makes available a class of monitoring systems that has historically been out of reach due to the cost of integration. We have also maintained backwards compatibility with our existing BIS engine technology to simplify the adoption of BISx by our existing partners.

BIS XP System

We began commercial distribution of the BIS XP system in September 2001. The BIS XP system runs on the A-2000 BIS Monitor, BIS Module Kit platform and BISx system and offers enhanced performance capabilities and expanded benefits compared with the previous version of our BIS system, enabling more precise measurement of brain activity to assess the level of consciousness. The BIS XP system is designed to detect and filter interference from muscle artifact and is resistant to interference from electrocautery devices. Additionally, it is able to provide enhanced detection of near suppression, a brain wave pattern occasionally observed during deep anesthesia and cardiac cases.

A-2000 BIS Monitor

We began commercial distribution of the A-2000 BIS Monitor, our third-generation monitor, in February 1998. The A-2000 BIS Monitor is a compact, lightweight, portable monitor designed to accommodate the space limitations and positioning requirements of surgical settings. The A-2000 BIS Monitor displays the BIS index and supporting information and includes our proprietary digital signal converter. This converter is a palm-sized module that serves as the interface between the BIS monitor and the BIS Sensors. The digital signal converter acquires the EEG signal from the BIS Sensors and converts the EEG signal to digital format. The EEG signal is then processed and the BIS index is displayed on the A-2000 BIS Monitor.

BIS Module Kit

In 1996, we introduced our BIS Module Kit, which is designed to facilitate the integration of the BIS index into equipment marketed by our original equipment manufacturers. The BIS Module Kit consists of two pieces, our proprietary digital signal converter and a small circuit board that resides in the original equipment manufacturer's system. The digital signal converter acquires the EEG signal from the BIS Sensors and converts the EEG signal to digital format. The circuit board then processes the EEG signal and outputs the BIS index to the original equipment manufacturer's system.

The common architecture of the BIS Module Kit facilitates integration of the BIS index into the original equipment manufacturer's system. Each original equipment manufacturer is required to obtain FDA and other appropriate regulatory clearance of its BIS module product.

BIS Module Kit — 4 Channel Support

In 2001, we introduced commercially the BIS Module Kit with 4 channel EEG monitoring capability to support a product introduction of one of our original equipment manufacturers.

BIS Sensors

BIS Extend Sensor. We created the BIS Extend Sensor, which was introduced commercially in 2002, for patients who are typically monitored for an extended period of time, such as in intensive care unit settings. We designed the BIS Extend Sensor with a surface that allows clinicians to record in writing the date and time of application, making it easier to track when a new sensor should be applied. The BIS Extend Sensor provides resistance to electrical artifact and is designed to detect and filter interference from muscle artifact caused by sources such as eye movement. The BIS Extend Sensor contains an electronic memory device that allows information about the sensor, such as lot code, expiration date and type of sensor, to be stored on the sensor and to be retrieved by the BIS monitor, BIS Module Kit or BISx system.

BIS Pediatric Sensor. The BIS Pediatric Sensor, which was introduced commercially in 2001, is smaller and easier to apply than our other BIS Sensors, and is designed to be visually appealing to children. The BIS Pediatric Sensor features an improved design for easy connection and enables the BIS system to automatically configure its settings for specific patient populations and applications. The BIS Pediatric Sensor contains an electronic memory device that allows information about the sensor, such as lot code, expiration date and type of sensor, to be stored on the sensor and to be retrieved by the BIS monitor, BIS Module Kit or BISx system.

BIS Quatro Sensor. The BIS Quatro Sensor, which was introduced commercially in 2001, offers enhanced performance in deep anesthetic states and improved resistance to interference from noise sources, such as high frequency/electromyography conditions, in the operating room and intensive care unit. The BIS Quatro Sensor features an improved design compared with the BIS Standard Sensor for easy connection and enables the BIS system to automatically configure its settings for specific patient populations and applications. The BIS Quatro Sensor contains an electronic memory device that allows information about the sensor, such as lot code, expiration date and type of sensor, to be stored on the sensor and to be retrieved by the BIS monitor, BIS Module Kit or BISx system.

BIS Sensor Plus. The BIS Sensor Plus, which was introduced commercially in 2001, is a second-generation disposable product for use with the A-2000 BIS Monitor and BIS Module Kit. The BIS Sensor Plus features an improved design compared with the BIS Standard Sensor for easy connection and enables the BIS system to automatically configure its settings for specific patient populations and applications. The BIS Sensor Plus contains an electronic memory device that allows information about the sensor, such as lot code, expiration date and type of sensor, to be stored on the sensor and to be retrieved by the BIS monitor, BIS Module Kit or BISx system.

BIS Standard Sensor. We commenced commercial distribution of the BIS Standard Sensor in January 1997. The BIS Standard Sensor is a single-use, disposable product for use with the A-2000 BIS Monitor, the A-1050 EEG Monitor with BIS and the BIS Module Kit. The BIS Standard Sensor is not compatible with the BIS XP system because it does not contain the easy connection feature and electronic memory device of

our other BIS Sensors. The BIS Standard Sensor provides a reliable and simple means of acquiring the EEG signal needed to generate the BIS index. The one-piece design allows quick and accurate placement on the patient's forehead. The BIS Standard Sensor connects to the monitor by a single-point proprietary connector.

Our Zipprep self-prepping technology is a key feature of each of our BIS Sensors. The technology is designed to minimize patient set-up time and establish effective electrical contact with the patient which enables consistent, accurate readings of the EEG signal. Prior to our development of the Zipprep technology, to obtain an EEG signal the user prepared a patient's skin by rubbing an abrasive cream over the forehead 10 to 20 times in order to remove the top layer of skin prior to applying the electrode.

Technology

We developed the BIS system, including our proprietary BIS index, over 10 years. The BIS index is a numerical index that quantitates the hypnotic component of anesthetic drug effect which correlates with the level of consciousness and is derived from an analysis of the EEG signal. In general, an EEG signal changes from a small-amplitude, high-frequency signal while a person is awake to a large-amplitude, low-frequency signal while a person is deeply anesthetized. Historically, researchers have used observations about these changes in the EEG signal to create mathematical algorithms to track the effects of anesthetics on the brain. However, these algorithms have not been widely adopted because studies have indicated that they generally do not provide sufficient clinically useful information to assess levels of consciousness with commonly used anesthetics and doses.

In developing the BIS index, we sought to improve these early EEG analyses in two ways. First, by using bispectral analysis, a mathematical tool that examines signals such as the EEG, we can extract new information from the EEG signal. Second, we developed proprietary processing algorithms that extract information from bispectral analysis, power spectral analysis and time domain analysis. Geophysicists originally used bispectral analysis in the early 1960s to study ocean wave motion, atmospheric pressure changes and seismic activity. The advent of high-speed, low-cost digital signal processors has enabled the use of bispectral analysis for other applications. By using bispectral analysis, we are able to extract a distinctive fingerprint of the underlying signal structure of the EEG and represent it as a three-dimensional mathematical model.

We created the BIS index to quantify changes in the EEG that relate to the effects of anesthetics on the brain in order to assess levels of consciousness. Over a number of years, Aspect and others collected a large database of high fidelity EEG recordings and clinical assessments from volunteers and patients receiving a wide variety of anesthetics. Researchers used clinical assessments such as a sedation rating scale, picture or word recall memory tests and response to stimuli to define levels of consciousness. Using statistical methods, we identified features within the EEG that correlated with sedation and loss of consciousness. We then used proprietary statistical methods to combine these features to generate an interpretive numerical index, which we refer to as the BIS index. The BIS index ranges from 100, indicating that the patient is awake, to zero, indicating an absence of electrical brain activity.

Clinical Development

Our clinical research and regulatory affairs group is responsible for:

- establishing collaborative relationships with leading clinical researchers,
- encouraging publications related to the BIS index in scientific literature,
- monitoring compliance with the FDA and other regulatory agencies' requirements,
- conducting clinical research with the goal of extending the application of patient monitoring with the BIS system to other settings and clinical uses, and
- collecting data for new product development.

We have a clinical database of over 5,000 cases for use in algorithm development and product validation based on trials that we conducted or sponsored or that third parties conducted.

In 1996, the FDA cleared the BIS index for marketing as a measure of anesthetic effect on the brain. The regulatory approval process involved studies we conducted on over 900 volunteers and patients. These studies characterized the relationships between the BIS index value and various clinical endpoints, including movement, response to incision, response to verbal command as a measure of consciousness in volunteers and patients, memory function, drug utilization and speed of patient recovery following surgery.

In October 2003, the FDA cleared a new indication for use specifying that use of BIS monitoring to help guide anesthetic administration may be associated with the reduction of the incidence of awareness with recall in adults during general anesthesia and sedation. This clearance was based on data that was collected in several multi-center, multinational studies to assess the incidence of awareness with recall and the impact of BIS monitoring. More than 30,000 patients were enrolled in these studies, which we conducted over a period of 18 months. Results from these studies demonstrated that awareness with recall occurs in approximately 1 to 2 cases per 1,000 patients during general anesthesia. Although our clinical research and practice experience suggests that awareness with recall is more likely to occur when BIS values are high, we do not believe that our experience demonstrates conclusively that patient monitoring with the BIS system will identify or prevent all cases of awareness with recall.

Since the introduction of our products, clinicians have reported to us cases of possible awareness with recall during surgical procedures monitored with the BIS system. These reports may not include all cases of awareness with recall that might have occurred during procedures where patients were monitored with the BIS system. In most of the cases that were reported to us, when BIS index values were recorded at the time of awareness with recall, high BIS index values were noted, indicating that the BIS index correctly identified the increased risk of awareness with recall in these patients. It is possible that, in a number of these reported cases, awareness with recall may not have been detected by monitoring with the BIS system.

We are also collaborating with researchers that are investigating the relationship between deep anesthetic levels as measured using the BIS system and one-year morbidity and mortality. One initial report (Monk TG, Saini V, Weldon BC, Sigl JC Anesthetic management and one-year mortality after noncardiac surgery. *Anesthesia Analg.* 2005 Jan;100(1):4-10.) suggested that deep anesthesia is associated with increased post-operative mortality in elderly patients undergoing general anesthesia. A second study involving over 4,000 patients has reportedly confirmed this association (Lennmarken C, Lindholm, ML, Greenwald S, Sandin R. Confirmation that Low Intraoperative BIS Levels Predict Increased Risk of Post-Operative Mortality. *Anesthesiology* 2003, Annual Meeting A-303). Finally, a retrospective analysis of Medicare national hospital data has suggested that hospitals that routinely use intraoperative BIS monitoring may have decreased postoperative one-year mortality rates (Monk T, Sigl J, Weldon C. Intraoperative BIS Utilization is Associated with Reduced One-Year Post-Operative Mortality. *Anesthesiology* 2003, Annual Meeting A-1361). We believe that these preliminary findings need to be further confirmed in additional trials. The association between intraoperative anesthesia care and long term outcomes was the topic of a recent collaborative conference of medical patient safety experts (<http://www.apsf.org/initiatives/outcomes.mspx>).

Sales, Marketing and Customers

Our customers include anesthesia providers, hospitals, outpatient surgical centers and individual practitioners in office-based practice. We market and sell our products to our customers through:

- our direct sales force,
- distributors, and
- original equipment manufacturers.

For the years ended December 31, 2004, 2003 and 2002, no one customer accounted for 10% or more of our total revenue.

Domestic

We market our BIS system in the United States primarily through a combination of a direct sales force, specialty distributors and original equipment manufacturers. As of December 31, 2004, our domestic sales force was composed of 44 sales professionals, seven clinical specialists and seven inside sales representatives.

We augment our direct sales force with medical products distributors in selected markets within the United States. We also market our products through the sales organizations of our original equipment manufacturers and contracts with hospital group purchasing organizations.

For those healthcare organizations desiring to purchase our BIS monitors directly from us, we offer two options. Our customers have the option either to purchase BIS monitors outright or to acquire BIS monitors pursuant to a sales-type lease agreement whereby the customer contractually commits to purchase a minimum number of BIS Sensors per BIS monitor per year. Under our sales-type leases, customers purchase BIS Sensors and the BIS monitor for the purchase price of the BIS Sensors plus an additional charge per BIS Sensor to pay for the purchase price of the BIS monitor and related financing costs over the term of the agreement. We also grant these customers an option to purchase the BIS monitors at the end of the term of the agreement, which is typically three to five years. We recognize Equipment revenue under sales-type lease agreements either at shipment or delivery in accordance with the agreed upon contract terms with interest income recognized over the life of the sales-type lease. The cost of the BIS monitor acquired by the customer is recorded as costs of revenue in the same period. We believe that the sales-type lease arrangement in some cases reduces the time required for customers to adopt the BIS system because it provides them with an option to utilize their operating budget to fund the purchase.

In addition to the two options noted above, under certain limited circumstances, we offer customers the opportunity to use the BIS monitors under our Equipment Placement program, which we refer to as the EP program. Under the EP program, the customer is granted the right to use the BIS monitors for a mutually agreed upon period of time. During this period, the customer purchases BIS Sensors at a price that typically includes a premium above the list price of the BIS Sensors to cover the rental of the equipment, but without any minimum purchase commitments. At the end of the agreed upon period, the customer has the option of purchasing the BIS monitors, continuing to use them under the EP program or returning them to us.

We focus our marketing initiatives on the various constituencies that may be involved in the decision-making process concerning the purchase of our products. For clinical audiences, we exhibit at tradeshowes, sponsor speakers at professional meetings and develop articles for publication in conjunction with industry experts. In addition, we work with hospitals to publicize their adoption of patient monitoring with the BIS system in an effort to assist them in communicating their commitment to improving the quality and efficiency of patient care.

Group Purchasing Agreements

We have entered into agreements with group purchasing organizations whereby the member healthcare organizations have the right to purchase BIS monitors and BIS Sensors under the pricing terms contained in the respective agreements. Under these agreements, the group purchasing organizations' field forces have agreed to work with our sales force to facilitate the adoption of our BIS technology by their affiliated healthcare organizations. We have agreements with the following group purchasing organizations:

<u>Group Purchasing Organization</u>	<u>Effective Date</u>	<u>Termination Provisions</u>
Consorta, Inc.	November 1, 2000	Unless terminated earlier by either party by giving 90 days prior written notice, this agreement expires on October 31, 2005.
Healthtrust Purchasing Group, L.P. . .	November 1, 2004	Unless terminated earlier by either party by giving 60 days prior written notice, this agreement expires on October 31, 2007.

We are currently in the process of renewing our agreement with Novation.

International

In 1998, we established our international operations and opened our international headquarters in The Netherlands. In 1999, we established a subsidiary in the United Kingdom. We continue to develop our international sales and distribution program through a combination of distributors and marketing partners, including companies with which we have entered into original equipment manufacturer relationships. As of December 31, 2004, we employed 25 persons in our international organization. The majority of our international sales are denominated in United States dollars. See Note 16, "Segment Information and Enterprise Reporting," of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K for domestic and international financial information.

We are subject to a number of challenges which specifically relate to our international business activities. These challenges include:

- failure of local laws to provide the same degree of protection against infringement of our intellectual property,
- protectionist laws and business practices that favor local competitors, which could slow our growth in international markets,
- difficulties in terminating or modifying distributor arrangements because of restrictions in markets outside the United States,
- less acceptance by foreign anesthesia providers of the use of disposable products similar to the BIS Sensors,
- delays in regulatory approval of our products,
- currency conversion issues arising from sales denominated in currencies other than the United States dollar,
- foreign currency exchange rate fluctuations,
- longer sales cycles to sell products like the BIS system to hospitals and outpatient surgical centers, which could slow our revenue growth from international sales, and
- longer accounts receivable payment cycles and difficulties in collecting accounts receivable.

Distribution Agreements

We entered into a master distribution agreement, effective September 1, 2000, with Datex-Ohmeda Division of Instrumentarium Corporation, under which Datex-Ohmeda agreed to act as a nonexclusive distributor of our A-2000 BIS Monitor, BIS Sensors and related products in a number of territories outside the United States. The master distribution agreement expired on November 1, 2003. After the expiration of this agreement, we entered into several country-specific distribution agreements.

We have also entered into a distribution agreement, dated January 21, 1998, with Nihon Kohden Corporation, under which Nihon Kohden has agreed to act as an exclusive distributor of our BIS monitors and related products in Japan. This agreement had an initial term of five years, and is subject to automatic renewal annually on February 21 of each year unless either party provides written notice of termination to the other party at least three months prior to expiration or any renewal period.

Original Equipment Manufacturer Relationships

We have entered into agreements with the following patient monitoring or anesthesia equipment companies that provide for the integration of our BIS technology into their equipment:

- Datascope Corp
- Dixtal Biomedica Ind E Com Ltda.
- Datex-Ohmeda Division of Instrumentarium Corporation
- GE Medical Systems — Information Technologies
- Philips Medizinsysteme Boeblingen GmbH
- Dräger Medizintechnik GmbH
- Dräger Medical Systems
- Nihon Kohden Corporation
- Spacelabs Medical, Inc.

Datascope Corp. Under an OEM Development and Purchase Agreement, dated July 24, 2003, between Aspect and Datascope Corp., Datascope agreed to integrate our BIS technology with Datascope's patient monitors. The initial term of this agreement continues for a period of five years following the introduction of the Datascope patient monitor with our BIS technology. On each anniversary date, one additional year is added to the term of this agreement to maintain a five year rolling term unless either party provides written notice of termination to the other party at least 60 days prior to the anniversary date.

Dixtal Biomedica Ind E Com Ltda. Under an OEM Development and Purchase Agreement, dated February 13, 2003, between Aspect and Dixtal Biomedica Ind E Com Ltda., or Dixtal, Dixtal agreed to integrate our BIS technology with Dixtal's patient monitors. The initial term of this agreement shall commence on the effective date and shall continue for a period of three years following introduction of the Dixtal BIS Module. The term of this agreement shall be renewed automatically for successive 12 month periods unless either party provides written notice of termination to the other party at least 60 days prior to the expiration of the agreement.

Datex-Ohmeda Division of Instrumentarium Corporation. Under an OEM Purchase Agreement, dated September 1, 2000, between Aspect and Datex-Ohmeda Division of Instrumentarium Corporation, or Datex-Ohmeda, Datex-Ohmeda agreed to integrate our BIS technology with Datex-Ohmeda's patient monitors. Unless terminated sooner, this agreement expires on December 31, 2005. However, the term of the agreement automatically renews for one-year periods unless either party provides advanced written notice of termination to the other party (i) by April 30, 2005 for termination on December 31, 2005, and (ii) 12 months prior to the automatic renewal date, for all future periods. Under a separate agreement with Datex-Ohmeda, dated September 1, 2000, we agreed to supply certain sensor products to Datex-Ohmeda for certain monitoring

products developed and introduced by Datex-Ohmeda. Unless terminated sooner, this agreement expires on December 31, 2005. The term of this agreement automatically renews for one-year periods unless either party provides written notice of termination to the other party, at least 12 months prior to expiration of the agreement. In October 2003, GE Medical Systems acquired Instrumentarium Corporation. We do not expect that this acquisition will have a material impact on our agreement or our operations.

GE Medical Systems — Information Technologies. Under an OEM Development and Purchase Agreement, dated December 22, 1999, between Aspect and GE Medical Systems — Information Technologies, GE Medical Systems agreed to integrate our BIS technology with GE Medical Systems' patient monitors. Unless terminated sooner, the agreement expires December 31, 2005. The term of the agreement automatically renews for one-year periods unless either party provides written notice of termination to the other party, at least 60 days prior to the expiration of the agreement.

Philips Medizinsysteme Boeblingen GmbH. Under an OEM Development and Purchase Agreement, dated August 6, 1999, between Aspect and Philips Medizinsysteme Boeblingen GmbH, or Philips, Philips agreed to integrate our BIS technology with Philips' patient monitors. Unless terminated sooner, this agreement expires on August 6, 2005. The term of the agreement automatically renews for one-year periods unless either party provides written notice of termination to the other party, at least 60 days prior to expiration of the agreement.

Dräger Medizintechnik GmbH. Under a Product Agreement with Dräger Medizintechnik GmbH, or Dräger, dated May 5, 1999, Dräger agreed to integrate the BIS Engine technology with Dräger's anesthesia equipment. Unless terminated sooner, this agreement will expire on December 31, 2006. This agreement automatically renews for successive one-year periods thereafter unless either party provides written notice of termination to the other party, at least 12 months prior to expiration of the renewal period.

Dräger Medical Systems. Under a BISx Development, Purchase and License Agreement with Dräger Medical Systems, dated January 28, 2004, Draeger agreed to integrate the BISx technology with Dräger patient monitors. Unless terminated sooner, this agreement expires on December 31, 2009. This agreement automatically renews for successive one-year periods thereafter unless either party provides written notice of termination to the other party, at least 12 months prior to expiration of the renewal period.

Nihon Kohden Corporation. Under an International License Agreement, dated January 21, 1998, between Aspect and Nihon Kohden Corporation, we have licensed our technology to Nihon Kohden on a worldwide non-exclusive basis. Nihon Kohden has the right to incorporate our technology into its patient monitoring systems. Unless terminated sooner, the agreement expires in July 2006. The Japanese Ministry of Health and Welfare approved marketing of the Nihon Kohden patient monitor integrating BIS technology in July 2002.

Spacelabs Medical, Inc. Pursuant to the terms of a Distribution and License Agreement, dated April 1, 1996, between Aspect and Spacelabs Medical, Inc., we have granted to Spacelabs a worldwide, non-exclusive license to the BIS index to develop, manufacture, market and sell Spacelabs monitoring equipment that incorporates the BIS index. Spacelabs also has the right to distribute our BIS Sensors on a non-exclusive basis throughout the world with the exception of the United States. Unless terminated sooner, this agreement expires in April 2006. In July 2002, Instrumentarium Corporation acquired Spacelabs Medical, Inc. This acquisition did not have a material impact on our agreements and our operations. In October 2003, GE Medical Systems acquired Instrumentarium Corporation. As part of the acquisition, GE Medical Systems divested Spacelabs Medical. OSI Systems completed the acquisition of Spacelabs Medical, Inc. in March of 2004. This acquisition did not have a material impact on our agreements and our operations.

In addition to the original equipment manufacturer agreements described above, on August 7, 2002 we entered into an agreement with Boston Scientific Corporation, a worldwide developer, manufacturer and marketer of medical devices, to introduce new sedation management technology to interventional and specialty medical procedure suites including the gastrointestinal endoscopy suite, the interventional cardiology suite and the interventional radiology suite. Our strategic alliance with Boston Scientific Corporation focuses on the development and distribution of brain monitoring technology specifically designed to enhance the

safety, efficiency and delivery of sedation to patients undergoing less-invasive medical procedures. As part of this alliance, we granted Boston Scientific Corporation an option to distribute the newly developed technology for monitoring patients under sedation in a range of less-invasive medical specialties. Pursuant to an amendment entered into in January 2005, this option to distribute has been extended through December 31, 2006. The term of this agreement continues until such time that Boston Scientific Corporation is no longer distributing our products, but in no event will extend beyond December 31, 2014.

Research and Development

Our research and development efforts focus primarily on continuing to improve the function and features of the BIS system and enhancing our technical leadership in signal-processing technology for use in patient care. We intend to leverage the BIS technology for the development of new monitoring products and proprietary disposable sensors for new applications and to take advantage of new opportunities such as the intensive care unit and procedural sedation markets.

During the fiscal years ended December 31, 2004, 2003 and 2002, we spent approximately \$7.5 million, \$7.3 million and \$7.8 million, respectively, for our research and development efforts, including clinical and regulatory expenses.

Our research and development department has four primary areas of responsibility:

- algorithm research,
- product development,
- pre-production quality assurance, and
- clinical engineering.

In 2003, we developed the BISx system which offers our original equipment manufacturer partners a BIS monitoring solution that provides the processing technology required to obtain BIS information from a single device the approximate size of a hockey puck. The BISx system has been designed to integrate with a wide range of patient monitoring platforms sold by leading monitoring manufacturers. BISx simplifies the incorporation of BIS technology into our original equipment manufacturer's monitoring systems and makes available a class of monitoring systems that has historically been out of reach due to the cost of integration. We also maintained backwards compatibility with our existing BIS engine technology to simplify the adoption of BISx by our existing partners.

We are in the process of investigating other product areas that utilize our expertise in anesthesia delivery and monitoring of the brain. We currently have a team that is investigating the use of the BIS monitoring platform to diagnose and track neurological disorders. We believe that because the BIS index quantifies changes in patients' brain wave activity, or EEG, and we have shown the BIS index correlates with memory function and changes in brain metabolism, it may be useful in detecting neurological disorders in patients. We are evaluating the application of the EEG-based parameters including those derived from the BIS index to measure brain function, which may assist in the detection of Alzheimer's disease, sleep cycles, seizure detection and/or other neurological disorders, including depression. Our recent research shows a correlation between the EEG-based parameters and the severity of dementia in patients with Alzheimer's disease and vascular dementia. This research complements our prior research demonstrating the correlation between the EEG-based parameters and the effects of pharmacological agents on the brain, changes in cerebral metabolic activity and clinical measures of cognitive and memory function. In 2003, we announced the results of studies which were done in collaboration with the Neuropsychiatric Institute and David Geffen School of Medicine at UCLA, showing that EEG-based brain monitoring technology predicts treatment response to antidepressant medications in depressed patients. We are also undertaking a clinical study working with the Depression Clinical and Research Program at Massachusetts General Hospital to explore the use of quantitative EEG-based brain monitoring technology as a predictor and correlate of treatment outcome in depressed patients. In 2004, interim results of this study demonstrated that our brain monitoring technology was able to predict the effectiveness of antidepressant medications in treating depressed patients.

Additionally, on July 12, 2002, we entered into an agreement with the Regents of the University of California under which the Regents of the University of California granted to us an option to enter into a license agreement conveying to Aspect an exclusive license to commercialize brain monitoring technology for depression which was developed by the Neuropsychiatric Institute and David Geffen School of Medicine at UCLA. On July 1, 2004, we exercised this option with the Regents of University of California.

Manufacturing

We use 12,000 square feet of our 61,000 square foot facility located in Newton, Massachusetts for manufacturing purposes with the remainder used for research and development, sales and marketing, general and administrative purposes and warehouse space. In this facility, we assemble all of our BIS hardware, and we produce substantially all of our BIS Sensors. Prior to 1998, we outsourced all BIS Sensor manufacturing. We currently outsource to third parties the production of our Zipprep EEG Electrodes.

Our production process for our BIS hardware consists of final assembly, integration and testing of standard and custom components. Our production process for our BIS Sensors consists of several manufacturing and assembly processes using custom components. Qualified sub-contractors, who have met our supplier certification process and are placed on an approved vendors list, produce certain custom components for our products. Some of the components that are necessary for the assembly of our BIS system, including some of the components used in our BIS Sensors, are currently provided to us by sole-source suppliers or a limited group of suppliers. We purchase components through purchase orders rather than long-term supply agreements and generally do not maintain large volumes of inventory. However, in February 2005, we entered into an agreement with the supplier of our electronic memory device used in the XP family of our disposable sensors to purchase a sufficient quantity of these electronic memory devices to maintain our inventory levels through at least the end of 2005. We have experienced shortages and delays in obtaining some of the components of our BIS system in the past, and we may experience similar shortages and delays in the future.

We maintain a quality-assurance program covering our manufacturing operations. Suppliers of purchased components are required to meet stated specifications. We certify suppliers prior to use by conducting audits and product inspections. We engage in ongoing evaluations of the performance of our suppliers by evaluating the results of inspections and tests as well as the timeliness of product deliveries. We employ numerous quality-assurance procedures during our in-house manufacturing processes to ensure finished products meet specification. Quality assurance procedures include operator training, process validation, equipment calibration, inspection and testing. All manufacturing procedures and processes are formally approved and updated using established revision control procedures. Documentation of in-process and final testing results is maintained in device or lot history records. We also maintain an ongoing post-sale performance-monitoring program.

Competition

The medical device industry is subject to intense competition. We are facing increased competition in the domestic level of consciousness market as a result of a number of competitors' monitoring systems which have been cleared by the FDA. The competitive devices are based on signal-processing of the EEG and are marketed by well-established medical products companies with significant resources. We believe that new competition will come from companies, including patient monitoring companies, currently marketing conventional EEG monitors utilizing standard signal-processing techniques such as spectral edge frequency analyses and median frequency analyses. We also believe that new competition will come from companies that market EEG monitors utilizing novel signal-processing technologies. Several potential competitive products are currently being marketed outside the United States although we do not believe that these products provide any significant advantages relative to our BIS technology. These other products and techniques include the use of auditory evoked potentials, heart rate variability, pupillary reflexes and skin blood flow measurement techniques. Additionally, a number of academic researchers worldwide are studying the potential use of other techniques to measure the effects of anesthetics.

We believe that the principal competitive factors that companies competing in the market for anesthesia-monitoring products must address include:

- improved patient outcomes,
- cost effectiveness,
- FDA approval/clearance,
- acceptance by leading anesthesia providers,
- availability of the technology in modular patient monitoring systems,
- ease of use for anesthesia providers,
- the publication of peer reviewed clinical studies,
- sales and marketing capability,
- timing and acceptance of product innovation,
- patent protection, and
- product quality.

Patents and Proprietary Rights

Medical technology companies place considerable importance on obtaining patent and trade secret protection for new technologies, products and processes. We consider the protection of our proprietary technologies and products to be important to the success of our business and rely on a combination of patents, licenses, copyrights and trademarks to protect our technologies and products. Our policy is to prosecute and enforce our patents and proprietary technology. We intend to continue to file United States and foreign patent applications to protect technology, inventions and improvements that are considered important to the development of our business. We also rely upon trade secrets, know-how, continuing technological innovation and licensing opportunities to develop and maintain our competitive position.

Trade secret protection for our unpatented confidential and proprietary information is important to us. To protect our trade secrets, we generally require our employees, consultants, scientific advisors, and parties to collaboration and licensing agreements to execute confidentiality agreements upon the commencement of employment, the consulting relationship, or the collaboration or licensing arrangement with us. However, others could either develop independently the same or similar information or obtain access to our proprietary information.

We have established a substantial proprietary position with respect to our products and our core signal processing technology, bispectral analysis, and its application to biological signals. The patent position of medical device companies is highly uncertain and involves complex legal and factual questions. There can be no assurance that any claims which are included in pending or future patent applications will be issued, that any issued patents will provide us with competitive advantage or will not be challenged by third parties, or that the existing or future patents of third parties will not have an adverse effect on our ability to commercialize our products. Furthermore, there can be no assurance that other companies will not independently develop similar products, duplicate any of our products or design around patents that may be issued to us. Litigation or administrative proceedings may be necessary to enforce any patents issued to us or to determine the scope and validity of others' proprietary rights in court or administrative proceedings.

We were issued our most recent United States patent on November 25, 2003. As of December 31, 2004, we held 20 United States patents and had filed eight additional United States patent applications. We also have numerous corresponding patents and pending patent applications in certain major industrial countries, including Canada, the major European market countries, Australia, Japan, Mexico and Brazil. The following chart summarizes our United States patents and patent applications:

Number of Issued Patents	Number of Currently Pending Patent Applications	Technology Covered	Patent Expiration Date
2	2	Closed loop delivery of anesthesia	May 3, 2020 May 3, 2020
4	—	Application of Bispectral and higher order analysis and various statistical modeling technologies to EEG signals	March 13, 2007 April 30, 2008 June 14, 2011 October 17, 2012
2	2	Methods of ensuring the reliability of the computed values	December 24, 2016 January 30, 2018
—	1	Method of monitoring anesthetic state using changes in arterial compliance	
1	—	Method of evaluating BIS information to facilitate clinical decision making	August 18, 2018
2	—	Application of bispectral analysis to electrocardiogram signals	May 15, 2007 June 4, 2008
—	3	Method of assessment of neurological conditions using EEG Bispectrum	
1	—	Zipprep self-prepping disposable electrode technology	April 26, 2011
2	—	Technology relating to the interface between the BIS Sensor and the BIS monitor	October 20, 2015 October 20, 2015
5	—	BIS Sensor technology	October 11, 2016 October 11, 2016 October 11, 2016 June 19, 2018 June 9, 2019
<u>1</u>	<u>—</u>	Signal acquisition technology for digital signal converter	January 17, 2012
<u>20</u>	<u>8</u>		

We have also been granted a perpetual, royalty-free, non-exclusive license by Siemens Medical Systems, Inc. to a United States patent covering signal acquisition technology for digital signal converters. Additionally, on July 1, 2004, we exercised an option under an agreement with the Regents of the University of California, acquiring an exclusive license to brain monitoring technology in the field of diagnosis and management of neurological diseases and conditions which was developed at the Neuropsychiatric Institute and David Geffen School of Medicine at UCLA.

Government Regulation

The manufacture and sale of medical diagnostic devices intended for commercial distribution and use are subject to extensive government regulation in the United States and in other countries. Our existing products are regulated in the United States as medical devices by the FDA under the Federal Food, Drug, and

Cosmetic Act, or FDC Act. Pursuant to the FDC Act, the FDA regulates the research, testing, manufacturing, safety, labeling, storage, record keeping, advertising, distribution and production of medical devices. Noncompliance with applicable regulations can result in refusal of the government to grant clearance for devices, withdrawal of prior clearances or approvals, total or partial suspension of production, fines, injunctions, civil penalties, recall or seizure of products and criminal prosecution.

Generally, before we can introduce a new product in the United States, we must obtain FDA clearance of a premarket notification under Section 510(k) of the FDC Act, referred to as a 510(k) notification, or approval of a premarket approval application under Section 515 of the FDC Act. To date, we have received clearance of 510(k) notification from the FDA with respect to the following products:

<u>Product</u>	<u>Date of Clearance of 510(k) Notification</u>
Zipprep EEG Electrodes	June 1994
A-1050 EEG Monitor with BIS	January 1996
BIS Standard Sensor	October 1996
BIS Clinical Utility Indication	October 1996
A-2000 BIS Monitor	February 1998
BIS Sensor Plus	January 2000
BIS Pediatric Sensor	October 2000
BIS XP Sensor family, including the BIS Quatro Sensor and BIS Extend Sensor	October 2000
BIS Module Kit	October 2000
BIS XP system	June 2001
A-2000 BIS Monitor Indication for Use change (Awareness)	October 2003
BISx system	February 2004

Once we have received clearance of a 510(k) notification, any products we manufacture or distribute are subject to extensive and continuing regulation by the FDA, including compliance with current Good Manufacturing Practices regulations, record keeping requirements, reporting of adverse experience with the use of the device, post-market surveillance, and other actions deemed necessary by the FDA. A new 510(k) notification is also required when a medical device manufacturer makes a change or modification to a legally marketed device that could significantly affect the safety or effectiveness of the device, or where there is a major change or modification in the intended use of the device. When any change or modification is made to a device or its intended use, the manufacturer must make the initial determination whether the change or modification is of a kind that would necessitate the filing of a new 510(k) notification. The FDA's regulations provide only limited guidance for making this determination.

The FDC Act regulates our quality control and manufacturing procedures by requiring us to demonstrate and maintain compliance with current Good Manufacturing Practices regulations, including quality systems regulations, as specified by the FDA. This regulation requires, among other things, that:

- we use written procedures to control our product development and manufacturing process,
- we validate, by extensive and detailed testing of every aspect of the process, our ability to produce devices which meet our manufacturing specifications,
- we investigate deficiencies in the manufacturing process or in the products produced, and
- we maintain detailed record keeping.

The current Good Manufacturing Practices regulations are applicable to manufacturers that produce components specifically for use in a medical device, and require design controls and maintenance of service records.

The FDA monitors compliance with current Good Manufacturing Practices regulations by conducting periodic inspections of manufacturing facilities. If violations of applicable regulations are noted during FDA inspections of our manufacturing facilities, the continued marketing of our products may be adversely affected. During the last routine inspection of our manufacturing facility by the FDA, the FDA noted no adverse observations. We believe that we have continued to maintain manufacturing facilities and procedures that are fully compliant with all applicable government quality systems regulations and guidelines.

In June 1998, we obtained ISO 9001: 1994 /EN 46001 international quality management system certification and European Medical Device Directive EC certification. These certifications show that our development, production and distribution of products comply with these standards and directives. Our continued compliance with these standards and directives has been confirmed since June 1998 in semi-annual surveillance audits. In April 2003, we obtained ISO 13485/CMDR certification from a CMDCAS (Canadian) recognized registrar. The ISO 9001, ISO 13485 and Medical Device Directive certifications signify compliance with the requirements enabling us to affix the CE Mark to our current products. The CE Mark denotes conformity with European standards for safety and allows certified devices to be placed on the market in all European Union countries. Since June 1998, medical devices cannot be sold in European Union countries unless they display the CE Mark.

We have established a dedicated regulatory and quality assurance group to maintain regulatory compliance and manage all of our quality-assurance activities. This group is responsible for the following activities:

- all regulatory submissions and communications,
- scheduling and performing company-wide internal audits,
- coordinating product update procedures and corrective actions,
- maintaining adherence to appropriate procedures and applicable requirements related to the FDA's quality systems regulations and appropriate international regulations, and
- coordinating appropriate documentation for FDA/ISO 9001/ISO 13485/CMDR/MDD review and audits.

Third-Party Reimbursement

Third-party payors, including Medicare, Medicaid, private health insurance carriers, managed care organizations, health care administration authorities in foreign countries and other organizations, may affect the pricing or demand for our products by regulating the maximum amount of reimbursement provided by these payors to the anesthesia providers, hospitals, outpatient surgical centers or physicians' offices where surgical procedures are performed.

We believe that anesthesia providers will not be separately reimbursed for patient-monitoring activities utilizing the BIS system. When facilities, such as hospitals or outpatient surgical centers, are reimbursed a fixed fee calculated on a per case, per stay, or per capita basis, the cost of monitoring with the BIS system will not be recovered by these providers unless the incremental costs of this monitoring are offset by savings in other costs, such as the costs of anesthetics or costs of the operating room or post-anesthesia care unit. This type of reimbursement policy has been adopted by Medicare, for example, for both inpatient and outpatient surgery. In such cases, patient monitoring with the BIS system may not result in sufficient savings to offset these costs. When reimbursement is based on charges or costs, patient monitoring with the BIS system may have the effect of reducing reimbursement because the charges or costs for surgical procedures, including operating room and post-anesthesia care unit charges and costs, may decline as a result of monitoring with the BIS system.

In January 2002, the Japanese Ministry of Health, Labor and Welfare granted reimbursement approval for use of our BIS monitors. Healthcare providers in Japan will be eligible to receive partial reimbursement of 1,000 yen each time BIS monitoring is used. We believe that the BIS system is the only commercially available consciousness monitoring technology in Japan.

Employees

As of December 31, 2004, we had 208 full-time employees worldwide in the following functional areas:

<u>Number of Employees</u>	<u>Functional Area</u>
96	Sales, Marketing and Clinical Support
35	Manufacturing and Engineering
33	General and Administrative
29	Research and Development
<u>15</u>	Clinical and Regulatory Affairs
<u>208</u>	Total

None of our employees are covered by a collective bargaining agreement. We consider relations with our employees to be good.

Scientific Advisors

We seek advice from a number of leading scientists and physicians on scientific and medical matters, including experts in EEG monitoring, pharmacology and anesthesia management. These individuals advise us concerning a number of matters, including:

- our research and development programs,
- the design and implementation of our clinical research program,
- our publication strategies,
- the identification of market opportunities from the clinical perspective, and
- specific scientific and technical issues.

Item 2. Properties.

We currently lease approximately 61,000 square feet in Newton, Massachusetts of which approximately 12,000 square feet is used for manufacturing and approximately 49,000 square feet is used for research and development, sales and marketing, general and administrative purposes and warehouse space. This lease expires on December 31, 2006. Effective February 1, 2004, the lease on our office space in Leiden, The Netherlands expired. In October 2003, we entered into a new lease for our international organization for approximately 2,765 square feet of office space located in De Meern, The Netherlands. This lease expires in October 2008. We believe our current facilities are sufficient to meet our needs through the fiscal year ending December 31, 2005 and that additional space will be available at a reasonable cost to meet our space needs thereafter.

Item 3. Legal Proceedings.

We are not a party to any material threatened or 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 December 31, 2004 through the solicitation of proxies or otherwise.

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters.

(a) Market for Registrant's Common Equity

Our common stock has been traded on the Nasdaq National Market under the symbol "ASPM" since January 28, 2000. The following table sets forth, for the years ended December 31, 2003 and 2004, the range of high and low sales prices for our common stock on the Nasdaq National Market. These prices do not include retail mark-up, mark-down or commissions and may not represent actual transactions.

	<u>High</u>	<u>Low</u>
2003:		
Quarter Ended March 29, 2003	\$ 4.63	\$ 3.32
Quarter Ended June 28, 2003	\$ 8.17	\$ 3.50
Quarter Ended September 27, 2003	\$10.50	\$ 6.92
Quarter Ended December 31, 2003	\$12.24	\$ 8.87
2004:		
Quarter Ended April 3, 2004	\$18.25	\$11.10
Quarter Ended July 2, 2004	\$19.67	\$14.22
Quarter Ended October 2, 2004	\$19.42	\$12.14
Quarter Ended December 31, 2004	\$25.96	\$17.00

On March 1, 2005, the last reported sales price of our common stock on the Nasdaq National Market was \$21.22 per share. As of March 1, 2005, there were approximately 455 holders of record of our common stock.

(b) Initial Public Offering

On February 2, 2000, we sold 3,500,000 shares of our common stock, at an initial public offering price of \$15.00 per share, pursuant to a Registration Statement on Form S-1 (Registration No. 333-86295), which was declared effective by the Securities and Exchange Commission on January 27, 2000. On February 4, 2000, the underwriters exercised in full their over-allotment option to purchase an additional 525,000 shares of our common stock at \$15.00 per share. The managing underwriters of our initial public offering were Morgan Stanley & Co. Incorporated, Deutsche Bank Securities Inc. and U.S. Bancorp Piper Jaffray Inc.

The aggregate gross proceeds raised in the offering were approximately \$60.4 million. Our total expenses in connection with the offering were approximately \$5.7 million, of which \$4.2 million was for underwriting discounts and commissions and, based on our reasonable estimate, approximately \$1.5 million was for other expenses. Our net proceeds from the offering were approximately \$54.6 million. From January 27, 2000, through December 31, 2004, we used approximately \$10.7 million of the net proceeds for the acquisition of machinery and equipment, leasehold improvements, furniture and fixtures, demonstration and evaluation equipment and new information systems. In addition, from January 27, 2000, through December 31, 2004, we used approximately \$43.9 million of the net proceeds for general corporate purposes, including working capital, product development, increasing our sales and marketing capabilities and expanding our international operations.

(c) Dividend Policy

We have never paid or declared any cash dividends on our common stock or other securities and do not anticipate paying cash dividends in the foreseeable future. We currently intend to retain all future earnings, if any, for use in the operation and expansion of our business. Payment of future cash dividends, if any, will be at the discretion of our board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs and plans for expansion. Additionally, our revolving line of credit agreements with each of Bank of America (formerly Fleet National Bank) and Boston Scientific Corporation prohibit the declaration or payment of cash dividends without the consent of these parties.

Item 6. Selected Consolidated Financial Data.

The following selected consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes and other financial information included elsewhere in this Annual Report on Form 10-K. The consolidated statements of operations data for the years ended December 31, 2004, 2003 and 2002, and the consolidated balance sheet data as of December 31, 2004 and 2003, are derived from our audited consolidated financial statements included in this Annual Report on Form 10-K. The consolidated statements of operations data for the years ended December 31, 2001 and 2000 and the consolidated balance sheet data as of December 31, 2002, 2001, and 2000 are derived from our audited consolidated financial statements not included in this Annual Report on Form 10-K. The historical results presented here are not necessarily indicative of future results.

	Year Ended December 31,				
	2004	2003	2002	2001	2000
	(in thousands, except per share data)				
Consolidated Statements of Operations Data:					
Revenue	\$55,564	\$44,091	\$ 39,776	\$ 35,829	\$36,024
Costs of revenue	<u>12,992</u>	<u>10,898</u>	<u>11,815</u>	<u>12,446</u>	<u>11,279</u>
Gross profit margin	42,572	33,193	27,961	23,383	24,745
Operating expenses:					
Research and development	7,470	7,287	7,827	7,467	5,713
Sales and marketing	26,776	25,321	28,449	28,396	21,979
General and administrative	<u>8,946</u>	<u>7,833</u>	<u>7,942</u>	<u>7,803</u>	<u>6,390</u>
Total operating expenses	<u>43,192</u>	<u>40,441</u>	<u>44,218</u>	<u>43,666</u>	<u>34,082</u>
Loss from operations	(620)	(7,248)	(16,257)	(20,283)	(9,337)
Interest income, net	<u>923</u>	<u>725</u>	<u>956</u>	<u>2,564</u>	<u>3,993</u>
Net income (loss)	<u>\$ 303</u>	<u>\$ (6,523)</u>	<u>\$ (15,301)</u>	<u>\$ (17,719)</u>	<u>\$ (5,344)</u>
Net income (loss) per share:					
Basic	\$ 0.02	\$ (0.34)	\$ (0.83)	\$ (1.01)	\$ (0.34)
Diluted	\$ 0.01	\$ (0.34)	\$ (0.83)	\$ (1.01)	\$ (0.34)
Weighted average shares used in computing net income (loss) per share:					
Basic	20,142	19,413	18,450	17,614	15,755
Diluted	22,286	19,413	18,450	17,614	15,755

	December 31,				
	2004	2003	2002	2001	2000
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash, cash equivalents and marketable securities ...	\$32,213	\$26,062	\$31,765	\$36,358	\$58,489
Restricted cash	82	5,100	5,100	5,100	—
Working capital	34,224	30,680	36,734	41,266	58,455
Total assets	61,690	47,740	54,480	63,369	79,411
Long-term debt	186	525	1,015	964	2,617
Total stockholders' equity	45,586	30,968	36,797	48,056	63,974

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

Overview

We derive our revenue primarily from sales of BIS monitors, our original equipment manufacturer products (including BIS Module Kits and BISx) and related accessories, which we collectively refer to as Equipment, and sales of BIS Sensors. For management purposes, we segregate our revenue by sales by region and sales by product group as shown in the following table:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(in thousands)		
Domestic revenue	\$43,638	\$35,968	\$33,089
Percent of total revenue	79%	82%	83%
International revenue	\$11,926	\$ 8,123	\$ 6,687
Percent of total revenue	21%	18%	17%
Total revenue	\$55,564	\$44,091	\$39,776
BIS Sensor revenue	\$39,585	\$30,391	\$26,724
Percent of total revenue	71%	69%	67%
Equipment revenue	\$15,979	\$13,700	\$13,052
Percent of total revenue	29%	31%	33%
Total revenue	\$55,564	\$44,091	\$39,776

At December 31, 2004, we had cash, cash equivalents, restricted cash and short-term investments of approximately \$32.3 million and working capital of approximately \$34.2 million.

We follow a system of fiscal quarters as opposed to calendar quarters. Under this system, the first three quarters of each fiscal year end on the Saturday closest to the end of the calendar quarter and the last quarter of the fiscal year always ends on December 31.

We believe our ability to grow our revenue is directly related to our ability to sell our Equipment to healthcare organizations and influence our customers after they purchase our Equipment to continue to purchase and use our BIS Sensors. We believe the increase in our installed base of Equipment resulting from the sale of BIS monitors and the sale of original equipment manufacturers' equipment incorporating our BIS Module Kit has been the primary reason for the growth in revenue from the sale of BIS Sensors. In order to successfully grow our revenue, we need to continue to focus on both selling our Equipment and improving our per monitor and per original equipment manufacturer products sensor utilization rate. To achieve this growth, we continue to implement new sales and marketing programs. We expect that as we grow our business, revenue from the sale of BIS Sensors will continue to contribute an increasing percentage of total revenue. Additionally, we believe that, over time, revenue from the sale of BIS Module Kits and our BISx system will increase as a percentage of total Equipment revenue as healthcare organizations purchase our technology as part of an integrated solution offered by our original equipment manufacturers.

We were profitable for the fiscal year ended December 31, 2004. We believe that maintaining our gross profit margin and controlling the growth of our operating expenses are important factors in sustaining profitability. To maintain our gross profit margin we believe we must continue to focus on maintaining our average unit sales prices of our BIS Sensors, increasing revenue from the sale of BIS Sensors as a percentage of total revenue, as BIS Sensors have a higher gross profit margin than Equipment, and continuing to reduce the costs of manufacturing our products.

For those healthcare organizations desiring to purchase our BIS monitors directly from us, we offer two options. Our customers have the option either to purchase BIS monitors outright or to acquire BIS monitors pursuant to a sales-type lease agreement whereby the customer contractually commits to purchase a minimum number of BIS Sensors per BIS monitor per year. Under our sales-type leases, customers purchase BIS Sensors and the BIS monitor for the purchase price of the BIS Sensors plus an additional charge per BIS Sensor to pay for the purchase price of the BIS monitor and related financing costs over the term of the

agreement. We also grant these customers an option to purchase the BIS monitors at the end of the term of the agreement, which is typically three to five years. We recognize Equipment revenue under sales-type lease agreements either at shipment or delivery in accordance with the agreed upon contract terms with interest income recognized over the life of the sales-type lease. The cost of the BIS monitor acquired by the customer is recorded as costs of revenue in the same period. Sales-type leases accounted for approximately 2%, 4% and 4% of total revenue in 2004, 2003 and 2002, respectively.

Under certain limited circumstances, we also offer customers the opportunity to use the BIS monitors under our Equipment Placement program, which we refer to as the EP program. Under the EP program, the customer is granted the right to use the BIS monitors for a mutually agreed upon period of time. During this period, the customer purchases BIS Sensors at a price that includes a premium above the list price of the BIS Sensors to cover the rental of the equipment, but without any minimum purchase commitments. At the end of the agreed upon period, the customer has the option of purchasing the BIS monitors, continuing to use them under the EP program or returning them to us.

We have subsidiaries in The Netherlands and the United Kingdom to facilitate the sale of our products into the international market. We are continuing to develop our international sales and distribution program through a combination of distributors and marketing partners, including companies with which we have entered into original equipment manufacturer relationships.

In January 1998, we entered into a distribution agreement with Nihon Kohden Corporation to distribute BIS monitors in Japan. In March 2000, Nihon Kohden received approval from the Japanese Ministry of Health, Labor and Welfare for marketing in Japan our A-1050 EEG Monitor with BIS and in May 2001, received approval for marketing in Japan our A-2000 BIS Monitor. Nihon Kohden has requested, but has not yet received, approval to market the BIS XP system in Japan. In January 2002, the Japanese Ministry of Health, Labor and Welfare granted reimbursement approval for use of our BIS monitors. With this approval, healthcare providers in Japan are eligible to receive partial reimbursement of 1,000 Yen each time BIS monitoring is used. In July 2002, the Japanese Ministry of Health, Labor and Welfare approved our BIS module for marketing in Japan. Sales to Nihon Kohden represented approximately 18%, 13% and 22%, respectively, of international revenue in 2004, 2003 and 2002, respectively.

Various factors may adversely affect our quarterly operating results through the first fiscal quarter of 2005 and beyond. These factors may have a potentially adverse effect on Equipment revenue and gross profit margin on Equipment as we continue to shift the focus of our placements from BIS monitors to BIS modules and BISx systems. In addition, in Japan, Nihon Kohden is awaiting approval of the BIS XP system, and we believe customers in Japan may continue to delay purchases of our products or may choose not to purchase our products pending this approval.

Critical Accounting Policies

Management's discussion and analysis of financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. Note 2 of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K includes a summary of our significant accounting policies and methods used in the preparation of our financial statements. In preparing these financial statements, we have made estimates and judgments in determining certain amounts included in the financial statements. The application of these accounting policies involves the exercise of judgment and use of assumptions as to future uncertainties and, as a result, actual results could differ from these estimates. We do not believe there is a significant likelihood that materially different amounts would be reported under different conditions or using different assumptions. We believe that our critical accounting policies and estimates are as follows:

Revenue Recognition

We sell our BIS monitors primarily through a combination of a direct sales force and distributors. Our original equipment manufacturer products are sold to original equipment manufacturers who in turn sell them to the end-user. BIS Sensors are sold through a combination of a direct sales force, distributors and original

equipment manufacturers. Direct product sales are structured as sales, sales-type lease arrangements or sales under our EP program. We recognize revenue from product sales when earned in accordance with Staff Accounting Bulletin, or SAB, No. 104, *Revenue Recognition*, and Emerging Issues Task Force, or EITF, 00-21, *Revenue Arrangements with Multiple Deliverables*. Revenue is recognized when persuasive evidence of an arrangement exists, product delivery has occurred or services have been rendered, the price is fixed or determinable and collectibility is reasonably assured. For product sales, revenue is not recognized until title and risk of loss have transferred to the customer.

We also recognize revenue from prepaid license and royalty fees. This revenue is deferred until product shipment or delivery in accordance with the terms of the agreement and license and royalty fees are earned in accordance with the terms of the respective agreements. In August 2002, we recorded approximately \$6,300,000 of deferred revenue related to an OEM product development and distribution agreement with Boston Scientific Corporation. The deferred revenue is being recognized ratably over the term of the OEM product development and distribution agreement, as amended, which represents our best estimate of our period of significant continuing obligation to provide Boston Scientific Corporation exclusive distribution rights to newly developed technology. We amended the OEM product development and distribution agreement in January 2005 and extended the estimate of our period of significant continuing obligation by two years. This will reduce the revenue that we record on a quarterly basis by approximately \$31,000 in 2005 and beyond. If our estimate of the period of significant continuing obligation is revised, this may have an impact on our revenue recognition of the deferred revenue related to the Boston Scientific Corporation agreement.

We follow Statement of Financial Accounting Standards, or SFAS, No. 13, *Accounting For Leases*, for our sales-type lease agreements. Under our sales-type leases, customers purchase BIS Sensors and the BIS monitor for the purchase price of the BIS Sensors plus an additional charge per BIS Sensor to pay for the purchase price of the BIS monitor and related financing costs over the term of the agreement. The minimum lease payment, consisting of the additional charge per BIS Sensor, less the unearned interest income, which is computed at the interest rate implicit in the lease, is recorded as the net investment in sales-type leases. We recognize Equipment revenue under sales-type lease agreements either at shipment or delivery in accordance with the agreed upon contract terms with interest income recognized over the life of the sales-type lease. The cost of the BIS monitor acquired by the customer is recorded as costs of revenue in the same period. We review and assess the net realizability of our investment in sales-type leases at each reporting period. This review includes determining, on a customer specific basis, if a customer is significantly underperforming relative to the customer's cumulative level of committed BIS Sensor purchases as required by the sales-type lease agreement. If a customer is underperforming, we record an allowance for lease payments as a charge to revenue to reflect the lower estimate of the net realizable investment in sales-type lease balance.

We recognize revenue either at shipment or delivery in accordance with the agreed upon contract terms with distributors and original equipment manufacturers in accordance with SAB No. 104. Sales to distributors and original equipment manufacturers include a clause in the contracts that indicates that customer acceptance is limited to confirmation that our products function in accordance with our applicable product specifications in effect at the time of delivery. Formal acceptance by the distributor or original equipment manufacturer is not necessary to recognize revenue provided that we objectively demonstrate that the criteria specified in the acceptance provisions are satisfied. Each product is tested prior to shipment to ensure that it meets the applicable product specifications in effect at the time of delivery. Additionally, we have historically had a minimal number of defective products shipped to distributors and original equipment manufacturers and any defective products are subject to repair or replacement under warranty as distributors and original equipment manufacturers do not have a right of return.

Allowance for Doubtful Accounts

We determine our allowance for doubtful accounts by using estimates based on our historical collections experience, current trends, historical write-offs of our receivables, credit policy and a percentage of our accounts receivable by aging category. We also review the credit quality of our customer base as well as changes in our credit policies. We continuously monitor collections and payments from our customers. While credit losses have historically been within our expectations and the provisions established, our credit loss rates

in the future may not be consistent with our historical experience. To the extent we experience a deterioration in our historical collections experience or increased credit losses, bad debt expense would likely increase in future periods.

Inventories

We value inventory at the lower of cost or estimated market, and determine cost on a first-in, first-out basis. We regularly review inventory quantities on hand and record a provision for excess or obsolete inventory primarily based on production history and on our estimated forecast of product demand. The medical industry in which we market our products is characterized by rapid product development and technological advances that could result in obsolescence of inventory. Additionally, our estimates of future product demand may prove to be inaccurate, in which case we would need to change our estimate of the provision required for excess or obsolete inventory. If revisions are deemed necessary, we would recognize the adjustments in the form of a charge to costs of revenue at the time of the determination. Therefore, although we continually update our forecasts of future product demand, any significant unanticipated declines in demand or technological developments, such as the introduction of new products by our competitors, could have a significant negative impact on the value of our inventory, results of operations and cash flows in future periods.

Warranty

Equipment that we sell generally is covered by a warranty period of one year. We accrue a warranty reserve for estimated costs to provide warranty services. Our estimate of costs to service our warranty obligations is based on our historical experience and expectation of future conditions. While our warranty costs have historically been within our expectations and the provisions established, to the extent we experience an increased number of warranty claims or increased costs associated with servicing those claims, our warranty expenses will increase, and we may experience decreased gross profit margin and cash flow.

Results of Operations

The following tables present, for the periods indicated, information expressed as a percentage of revenue and a summary of our total revenue. This information has been derived from our consolidated statements of operations included elsewhere in this Annual Report on Form 10-K. You should not draw any conclusions about our future results from the results of operations for any period.

	Year Ended December 31,		
	2004	2003	2002
Revenue	100%	100%	100%
Costs of revenue	<u>23</u>	<u>25</u>	<u>30</u>
Gross profit margin	77	75	70
Operating expenses:			
Research and development	14	17	20
Sales and marketing	48	57	71
General and administrative	<u>16</u>	<u>18</u>	<u>20</u>
Total operating expenses	<u>78</u>	<u>92</u>	<u>111</u>
Loss from operations	(1)	(17)	(41)
Interest income, net	<u>2</u>	<u>2</u>	<u>2</u>
Net income (loss)	<u>1%</u>	<u>(15)%</u>	<u>(39)%</u>

Year Ended December 31, 2004 Compared to Year Ended December 31, 2003

	<u>2004</u>	<u>2003</u>	<u>Percentage Increase (Decrease)</u>
	(in thousands except unit amounts)		
Revenue — Worldwide			
BIS Sensor	\$ 39,585	\$ 30,391	30%
BIS monitor	9,551	6,942	38%
Original equipment manufacturer products	3,008	3,229	(7)%
Other equipment and accessories	<u>3,420</u>	<u>3,529</u>	(3)%
Total Equipment	<u>15,979</u>	<u>13,700</u>	17%
Total revenue	<u>\$ 55,564</u>	<u>\$ 44,091</u>	26%
Unit Analysis — Worldwide			
BIS Sensors	2,820,000	2,244,000	26%
BIS monitors	1,948	1,340	45%
Original equipment manufacturer products	2,239	2,259	(1)%
Installed base	24,133	19,517	24%

Revenue. The increase in revenue from the sale of BIS Sensors from 2003 to 2004 was primarily attributable to an increase of approximately 26% in the number of BIS Sensors sold as a result of growth in the installed base of BIS monitors and original equipment manufacturer products. The increase in the number of BIS Sensors sold was complemented by an increase in the average selling price of BIS Sensors of approximately 4%. Our installed base of BIS monitors and original equipment manufacturer products increased approximately 24% to 24,133 units at December 31, 2004 compared with 19,517 units at December 31, 2003.

The increase in revenue from the sale of Equipment from 2003 to 2004 was primarily the result of an increase of approximately 38% in BIS monitor revenue, which resulted from an increase in unit sales volume of approximately 45% as we shipped 1,948 BIS monitors in 2004 compared with 1,340 BIS monitors in 2003. The 45% increase in unit volume relates primarily to BIS monitor shipments to Japan. For the year ended December 31, 2004, we shipped 320 BIS monitors to Japan compared with no shipments in 2003. The shipments to our distributor in Japan during 2004 were in response to increased demand for our BIS technology as Nihon Kohden continues to await approval from the Japanese Ministry of Health, Labor and Welfare to market the BIS XP system in Japan. The increase in BIS monitor revenue was offset by a decrease of approximately 7% in original equipment manufacturer product revenue. The number of original equipment manufacturer products shipped to our original equipment manufacturers decreased slightly in 2004 compared with 2003. In 2004, the number of original equipment manufacturer products shipped to our original equipment manufacturers decreased approximately 1%, from 2,259 original equipment manufacturer products shipped in 2003 to 2,239 original equipment manufacturer products shipped in 2004.

Our gross profit margin was approximately 77% of revenue in 2004 compared with a gross profit margin of approximately 75% of revenue in 2003. The increase in the gross profit margin in 2004 compared with 2003 was primarily attributable to increased sales of our BIS Sensors as a percentage of total revenue. BIS Sensors have a higher gross profit margin than Equipment. BIS Sensors accounted for approximately 71% of our total revenue in 2004 compared with approximately 69% of our total revenue in 2003. The increased unit volume of BIS Sensors, combined with an increase in the BIS Sensor average unit selling price contributed to the increase in our gross profit margin in 2004 compared with 2003. The increase in the average unit selling price of our BIS Sensors resulted primarily from increased sales of our BIS XP family of sensors as our BIS XP technology continues to represent a growing percentage of our installed base.

Expense Overview

	<u>2004</u>	<u>2003</u>	<u>Percentage Increase (Decrease)</u>
	(in thousands)		
Expenses			
Research and development.....	\$ 7,470	\$ 7,287	3%
Sales and marketing	\$26,776	\$25,321	6%
General and administrative	\$ 8,946	\$ 7,833	14%

Research and Development. The increase in research and development expenses in 2004 compared with 2003 was primarily attributable to an increase of approximately \$280,000 in compensation and benefits relating to an increase in headcount during the year and an increase in patent related expenses of approximately \$61,000 as we continue to strengthen our intellectual property rights with respect to certain products in the countries in which we distribute our products. These increases were partially offset by a decrease in consulting expenses of approximately \$155,000 for various ongoing projects. We expect research and development expenses in 2005 to increase compared with 2004 as we continue to invest in clinical studies and expand applications for our technology, including our initiatives into neuroscience.

Sales and Marketing. The increase in sales and marketing expenses in 2004 compared with 2003 was primarily attributable to an increase of approximately \$1.3 million in operating expenses associated with our international subsidiaries and an increase in sales commission expense of approximately \$1.2 million. The \$1.3 million increase in expenses associated with our international subsidiaries was driven by an increase of approximately \$1.0 million in compensation and benefits as a result of increased headcount and an increase of approximately \$156,000 in consulting expenses. The increases in sales and marketing expenses were partially offset by a decrease of approximately \$273,000 in trade show expenses, a decrease in commissions paid to group purchasing organizations of approximately \$216,000, a decrease in advertising expenses of approximately \$199,000, a decrease of approximately \$170,000 in travel and entertainment expenses and a decrease in market research and development expenses of approximately \$79,000. We expect sales and marketing expenses in 2005 to increase compared with 2004.

General and Administrative. The increase in general and administrative expenses in 2004 compared with 2003 was attributable to an increase of approximately \$324,000 in compensation and benefits, an increase of approximately \$389,000 in professional and consulting fees, primarily related to services in connection with Section 404 of the Sarbanes-Oxley Act of 2002 and an increase in our commercial insurance expenses of approximately \$65,000. We expect general and administrative expenses in 2005 to increase compared with 2004.

Interest Income. Interest income increased to approximately \$1.0 million in 2004 from approximately \$924,000 in 2003, an increase of approximately 11%. The increase in interest income from 2003 to 2004 was primarily attributable to higher cash and investment balances throughout 2004 and a slight increase in interest rates. We expect interest income to increase in 2005 compared with 2004 due to the increase in our cash and investment balances.

Interest Expense. Interest expense decreased to approximately \$106,000 in 2004 from approximately \$199,000 in 2003, a decrease of approximately 47%. The decrease in interest expense in 2004 was a result of lower average outstanding debt obligations. We expect interest expense to decrease slightly in 2005 compared with 2004 as a result of continuing lower average outstanding debt obligations.

Net Income (Loss). As a result of the factors discussed above, in 2004 we had net income of approximately \$303,000 compared with a net loss of approximately \$6.5 million in 2003. We did not record a provision for income taxes for the year ended December 31, 2004 as we have significant deferred tax assets available to offset any income tax liabilities and expenses. At December 31, 2004, we had a full valuation allowance against these gross deferred tax assets as we have determined that it is more likely than not that some portion or all of the deferred tax assets will not be realized.

Year Ended December 31, 2003 Compared to Year Ended December 31, 2002

	<u>2003</u>	<u>2002</u>	<u>Percentage Increase (Decrease)</u>
	(in thousands except unit amounts)		
Revenue — Worldwide			
BIS Sensor	\$ 30,391	\$ 26,724	14%
BIS monitor	6,942	8,181	(15)%
BIS Module Kit	3,229	1,479	118%
Other equipment and accessories	<u>3,529</u>	<u>3,392</u>	4%
Total Equipment	<u>13,700</u>	<u>13,052</u>	5%
Total revenue	<u>\$ 44,091</u>	<u>\$ 39,776</u>	11%
Unit Analysis — Worldwide			
BIS Sensors	2,244,000	2,055,000	9%
BIS monitors	1,340	1,714	(22)%
Original equipment manufacturer BIS modules	2,259	1,066	112%
Installed base	19,517	16,210	20%

Revenue. The increase in revenue from the sale of BIS Sensors from 2002 to 2003 was primarily attributable to an increase of approximately 9% in the number of BIS Sensors sold as a result of growth in the installed base of BIS monitors and BIS modules. The increase in the number of BIS Sensors sold was complemented by an increase in the average selling price of BIS Sensors of approximately 4%. Our installed base of BIS monitors and BIS modules increased approximately 20% to 19,517 units at December 31, 2003 compared to 16,210 units at December 31, 2002.

The increase in revenue from the sale of Equipment from 2002 to 2003 was primarily driven by an increase in BIS Module Kit revenue of approximately 118%. The increase in module revenue for this period was due to an increase of approximately 112% in the number of BIS Module Kits shipped to our original equipment manufacturers, from 1,066 BIS Module Kits in 2002 to 2,259 BIS Module Kits in 2003. The increase in BIS Module Kit revenue in this period was partially offset by a decrease in BIS monitor revenue of approximately 15%. The decrease in BIS monitor revenue resulted from a decrease of approximately 22% in unit volume, as we shipped 1,714 BIS monitors in 2002 compared to 1,340 BIS monitors in 2003. The decrease in monitor unit volume was a result of a decrease of approximately 25% in international BIS monitors shipped, particularly relating to units shipped to Japan. Sales of BIS monitor units in Japan decreased from 200 units shipped in 2002 to none in 2003 as Nihon Kohden delayed additional BIS monitor purchases pending the Japanese Ministry of Health, Labor and Welfare approval of the BIS XP technology.

Our gross profit margin was approximately 75% of revenue in 2003 as compared to a gross profit margin of approximately 70% of revenue in 2002. The increase in gross profit margin for the year ended December 31, 2003 was a result of four factors. First, we experienced increased sales of our BIS Sensors as a percentage of total revenue during the year ended December 31, 2003. BIS Sensors accounted for approximately 69% of total revenue for the year ended December 31, 2003 as compared to 67% for the year ended December 31, 2002. BIS Sensors have a higher gross profit margin than Equipment. Second, we had an increase in the worldwide average unit price on BIS monitors of approximately 8% in 2003 compared to 2002. Third, we have had a reduction in depreciation expense related to BIS monitors used in the EP program as the existing pool of BIS monitors becomes fully depreciated and we substantially reduce our focus and reliance on the EP program. Finally, we recognized approximately \$615,000 of deferred revenue in the year ended December 31, 2003 related to the strategic alliance with Boston Scientific Corporation without any corresponding costs of revenue, increasing the gross profit margin by approximately 2%.

Expense Overview

	<u>2003</u>	<u>2002</u>	<u>Percentage Increase (Decrease)</u>
	(in thousands)		
Expenses			
Research and development.....	\$ 7,287	\$ 7,827	(7)%
Sales and marketing	\$25,321	\$28,449	(11)%
General and administrative	\$ 7,833	\$ 7,942	(1)%

Research and Development. The decrease in research and development expenses in 2003 compared with 2002 was primarily attributable to a decrease in research and development personnel and related payroll and other expenses of approximately \$659,000. This decrease was offset by an increase in consulting expenses of approximately \$138,000 for various ongoing projects.

Sales and Marketing. The decrease in sales and marketing expenses in 2003 compared with 2002 was attributable to decreases of approximately \$757,000 in travel and entertainment expenses, approximately \$987,000 in operating expenses associated with our international subsidiaries, approximately \$739,000 in expenses related to advertising, public relations, tradeshow and the internet, approximately \$339,000 in recruiting expenses and approximately \$748,000 in payroll expense. The \$987,000 decrease in expenses associated with our international subsidiaries was driven by a decrease of approximately \$573,000 in personnel and related payroll expenses. The decreases in sales and marketing expenses were offset by an increase in commissions expense of approximately \$1.2 million.

General and Administrative. The decrease in general and administrative expenses in 2003 compared with 2002 was attributable to a decrease of approximately \$388,000 in professional services and a decrease of approximately \$137,000 in our provision for doubtful accounts due to improvements in our historical collection experience. These decreases were offset by increases of approximately \$302,000 in personnel related payroll and other expenses and approximately \$101,000 primarily as a result of an increase in the annual premium for our directors and officers liability insurance coverage.

Interest Income, Net. Net interest income decreased to approximately \$725,000 in 2003 from approximately \$956,000 in 2002, a decrease of approximately 24%. Interest income decreased to approximately \$924,000 in 2003 from approximately \$1.2 million in 2002, a decrease of approximately 23%. The decrease in interest income was primarily attributable to lower cash and investment balances resulting from operating losses and our other uses of cash, and lower interest rates on our investments as a result of general interest rate declines.

Interest expense decreased to approximately \$198,000 in 2003 from approximately \$243,000 in 2002, a decrease of approximately 18%. The decrease in interest expense in 2003 was a result of lower average outstanding debt obligations because we did not draw down on our lines of credit in 2003 as we did in 2002.

Net Loss. As a result of the factors discussed above, in 2003 we had a net loss of approximately \$6.5 million as compared with a net loss of approximately \$15.3 million in 2002.

Quarterly Results of Operations

The following table sets forth unaudited selected operating results for each of the eight fiscal quarters in the two years ended December 31, 2004. We believe that the following selected quarterly information includes all adjustments (consisting only of normal, recurring adjustments) that we consider necessary to present this information fairly. This financial information should be read in conjunction with the financial statements and related notes included elsewhere in this Annual Report on Form 10-K. Our results of operations have fluctuated in the past and are likely to continue to fluctuate significantly from quarter to quarter in the future. Therefore, results of operations for any previous periods are not necessarily indicative of results of operations to be recorded in the future.

	Quarter Ended							
	March 29, 2003	June 28, 2003	September 27, 2003	December 31, 2003	April 3, 2004	July 3, 2004	October 2, 2004	December 31, 2004
	(in thousands)							
Revenue	\$10,127	\$10,709	\$11,189	\$12,066	\$12,797	\$13,426	\$13,625	\$15,716
Gross profit margin	7,578	7,992	8,428	9,195	9,932	10,249	10,380	12,011
Operating expenses . .	10,296	9,972	9,982	10,191	10,908	10,818	10,118	11,349
Net (loss) income . .	(2,524)	(1,795)	(1,387)	(817)	(796)	(376)	520	955

Liquidity and Capital Resources

Our liquidity requirements have historically consisted of research and development expenses, sales and marketing expenses, capital expenditures, working capital and general corporate expenses. From our inception through January 2000, we financed our operations primarily from the sale of convertible preferred stock. Through December 31, 2004, we raised approximately \$85.7 million from private equity financings, received approximately \$3.4 million in equipment financing and received approximately \$5.1 million of financing related to our investment in sales-type leases. We also received approximately \$2.8 million of financing under a term loan in December 1999. The outstanding principal on the equipment and term loans was paid in May 2001. In February 2000, we completed our initial public offering of an aggregate of 4,025,000 shares of common stock and received net proceeds of approximately \$54.6 million.

In May 2001, we entered into an agreement with Bank of America (formerly Fleet National Bank), for a \$5.0 million revolving line of credit, which expires in May 2005. The revolving line of credit with Bank of America contains restrictive covenants that require us to maintain liquidity and net worth ratios and is secured by certain investments, which are shown as restricted cash on our consolidated balance sheets. In connection with the extension of our revolving line of credit agreement in May 2004, we are now required to maintain restricted cash in an amount equal to 102% of the outstanding amounts under the revolving line of credit. Prior to the extension in May 2004, we were required to maintain restricted cash in an amount equal to 102% of the \$5.0 million commitment. At December 31, 2004, we were in compliance with all covenants contained in the revolving line of credit agreement. Interest on any borrowings under the revolving line of credit is, at our election, either the prime rate or at LIBOR plus 2.25%. At December 31, 2004, the interest rate on the line of credit was 5.25%. Up to \$1.5 million of the \$5.0 million revolving line of credit is available for standby letters of credit. At December 31, 2004, there was no amount outstanding under this line of credit and we had standby letters of credit outstanding in the amount of \$80,000.

In August 2002, we entered into a strategic alliance with Boston Scientific Corporation whereby we sold 1,428,572 shares of our common stock at a purchase price per share of \$7.00 to Boston Scientific Corporation. Gross cash proceeds from this sale of common stock were approximately \$10.0 million. Note 19 of our Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K includes additional information relating to the strategic alliance with Boston Scientific Corporation.

In connection with our strategic alliance with Boston Scientific Corporation, we also entered into an agreement with Boston Scientific Corporation for a revolving line of credit under which we are entitled to borrow up to \$5.0 million. The revolving line of credit expires in August 2007 and may be extended at the discretion of Boston Scientific Corporation. Interest on any borrowings under this revolving line of credit is at a

rate equal to the LIBOR rate at which Boston Scientific Corporation, under its own revolving credit facility, is entitled to borrow funds, plus any additional amounts payable thereon by Boston Scientific Corporation under such revolving credit facility, plus eighty basis points. Our revolving line of credit with Boston Scientific Corporation is secured by our inventory and certain of our accounts receivable and contains certain restrictive covenants covering the collateral. At December 31, 2004, there was no outstanding balance under this revolving line of credit and we were in compliance with all covenants contained in the revolving line of credit agreement.

On April 7, 2004, in order to raise cash for working capital and other general corporate purposes, we entered into another stock purchase agreement with Boston Scientific Corporation to issue and sell to Boston Scientific Corporation an aggregate of 500,000 shares of our common stock at a purchase price of \$16.21 per share. We completed the sale on June 8, 2004. Gross cash proceeds from this sale of common stock were approximately \$8.1 million.

We expect to meet our short-term liquidity needs through the use of cash and short-term investments on hand at December 31, 2004. We believe that the financial resources available to us, including our current working capital, our long-term investments and available revolving lines of credit will be sufficient to finance our planned operations and capital expenditures through at least the end of 2005. However, our future liquidity and capital requirements will depend upon numerous factors, including the resources required to further develop our marketing and sales organization domestically and internationally, to finance our research and development programs, to implement new marketing programs, to finance our sales-type lease program and to meet market demand for our products.

Working capital at December 31, 2004 was approximately \$34.2 million compared with approximately \$30.7 million at December 31, 2003. The increase in working capital from December 31, 2003 to December 31, 2004 was primarily attributable to an increase in our short-term investments which resulted from the sale of common stock to Boston Scientific Corporation in June 2004 and an increase in our accounts receivable.

Cash from Operations. We used approximately \$530,000 of cash for operations in 2004. Cash used for operations during this period was primarily driven by an increase in accounts receivable of approximately \$2.0 million due to increased sales offset by depreciation and amortization of approximately \$1.5 million.

We used approximately \$10.4 million of cash for operations during the three years ended December 31, 2004, which was primarily driven by net operating losses of approximately \$21.5 million. The operating losses were partially offset by approximately \$6.1 million in depreciation and amortization expense, a net increase in deferred revenue of approximately \$4.3 million primarily related to proceeds received in connection with the strategic alliance entered into in August 2002 and a net decrease in inventory of approximately \$2.9 million.

Cash from Investing Activities. We used approximately \$10.7 million of cash from investing activities in 2004. The cash used for investing activities was the result of net purchases of investments of approximately \$15.2 million in 2004 offset by a decrease in restricted cash of approximately \$5.0 million. The reduction in restricted cash resulted from the amendment of our revolving line of credit with Bank of America in May 2004.

We used approximately \$3.9 million for investing activities during the three years ended December 31, 2004 primarily as a result of net purchases of investments of approximately \$7.0 million and acquisition of property, plant and equipment of approximately \$3.1 million, partially offset by a decrease in restricted cash of approximately \$5.0 million.

Cash from Financing Activities. We received approximately \$13.6 million of cash from financing activities in 2004 primarily as a result of proceeds from the issuance of our common stock to Boston Scientific Corporation of approximately \$8.1 million and approximately \$6.1 million of proceeds from the issuance of our common stock upon the exercise of stock options granted under our stock option plans, partially offset by payments of principal on debt related to our investment in sales-type leases of approximately \$706,000.

We received approximately \$14.7 million of cash from financing activities during the three years ended December 31, 2004. Cash provided by financing activities during this period was primarily the result of proceeds from the sale of shares of our common stock in connection with a strategic alliance entered into in August 2002, and the additional sale of 500,000 shares to Boston Scientific Corporation in June 2004.

In July 1999, we entered into an agreement under which we can sell a portion of our existing and future investment in sales-type leases to Americorp Financial, Inc. Through December 31, 2004, we sold approximately \$5.1 million of our investment in sales-type leases under this agreement. In accordance with SFAS No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities — A replacement of FASB Statement No. 125*, the proceeds from these sales are classified as debt. Payments on the outstanding principal under this debt match the timing of the payments due on the underlying investment. At December 31, 2004, approximately \$497,000 is recorded as debt on our consolidated balance sheet.

We had capital expenditures of approximately \$1.2 million for the year ended December 31, 2004, which related primarily to the purchase of manufacturing equipment for use in the production of our BIS Sensors and the purchase of computer hardware and third-party software. At December 31, 2004, we did not have any commitments for capital expenditures, however, we anticipate that the level of capital expenditures in 2005 will increase from the level of capital expenditures during the year ended December 31, 2004.

We have summarized below our contractual cash obligations as of December 31, 2004:

<u>Contractual Obligations</u>	<u>Payments Due By Period</u>				
	<u>Total</u>	<u>Less Than One Year</u>	<u>One to Three Years</u>	<u>Three to Five Years</u>	<u>After Five Years</u>
Operating leases	\$2,812	\$1,258	\$1,460	\$94	\$—
Debt related to the sale of investment in sales type leases . . .	497	311	186	—	—
Purchase commitment	<u>1,400</u>	<u>1,400</u>	<u>—</u>	<u>—</u>	<u>—</u>
Total contractual cash obligations . .	<u>\$4,709</u>	<u>\$2,969</u>	<u>\$1,646</u>	<u>\$94</u>	<u>\$—</u>

In February 2005, we entered into an agreement with the supplier of our electronic memory device used in the XP family of our disposable sensors to purchase a sufficient quantity of these electronic memory devices to maintain our inventory levels through at least the end of 2005. This commitment is expected to be approximately \$1.4 million.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements or relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which are typically established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Income Taxes

We have net operating loss carryforwards for federal and state income tax purposes of approximately \$92,195,000 and \$34,654,000, respectively, and tax credits for federal and state income tax purposes of approximately \$2,469,000 and \$1,457,000, respectively. These tax attributes began expiring in 2002 and will continue to expire through 2024 if not utilized. Additionally, the net operating loss and tax credit carryforwards are subject to review by the Internal Revenue Service. Ownership changes, as defined under Sections 382 and 383 in the Internal Revenue Code, may limit the amount of these tax attributes that can be utilized annually to offset future taxable income or tax liabilities. The amount of the annual limitation is determined based on the Company's value immediately prior to the ownership change. Subsequent ownership changes may further affect the limitation in future years. We have substantial net operating loss carryforwards that have generated significant deferred tax assets. We have provided a full valuation allowance against these

deferred tax assets as we have determined that it is more likely than not that we will not be able to fully utilize these net operating loss carryforwards.

Effects of Inflation

We believe that inflation and changing prices over the past three years have not had a significant impact on our revenue or on our results of operations.

Recent Accounting Pronouncements

On December 16, 2004, the Financial Accounting Standards Board, or FASB, issued Statement No. 123 (revised 2004), *Share Based Payment*, or SFAS No. 123R, which is a revision of Statement No. 123, *Accounting for Stock-Based Compensation*, or SFAS 123. SFAS 123R supersedes APB Opinion No. 25, *Accounting for Stock Issued to Employees*, and amends SFAS No. 95, *Statement of Cash Flows*. Under SFAS No. 123R, we must calculate and record in the income statement the cost of equity instruments, such as stock options or restricted stock, awarded to employees for services received; pro forma disclosure is no longer permitted. The cost of the equity instruments is to be measured based on fair value of the instruments on the date they are granted (with certain exceptions) and is required to be recognized over the period during which the employees are required to provide services in exchange for the equity instruments. The statement is effective in the first interim or annual reporting period beginning after June 15, 2005.

SFAS No. 123R provides two alternatives for adoption: (1) a “modified prospective” method in which compensation cost is recognized for all awards granted subsequent to the effective date of this statement as well as for the unvested portion of awards outstanding as of the effective date; or (2) a “modified retrospective” method which follows the approach in the “modified prospective” method, but also permits entities to restate prior periods to record compensation cost calculated under SFAS No. 123 for the pro forma disclosure. We plan to adopt SFAS No. 123R as of July 3, 2005, the beginning of our third fiscal quarter of 2005. Since we currently account for stock options granted to employees and shares issued under our employee stock purchase plan in accordance with the intrinsic value method permitted under APB Opinion No. 25, no compensation expense generally is recognized. Management expects that the adoption of SFAS No. 123R will have a significant impact on our results of operations, although it will have no impact on our overall financial position. The impact of adopting SFAS No. 123R on periods after adoption cannot be accurately estimated at this time, as it will depend on the market value and the amount of share based awards granted in future periods. However, had we adopted SFAS No. 123R in prior periods, the impact of that standard would have approximated the impact of SFAS No. 123 as described in the disclosure of pro forma net income (loss) and earnings (loss) per share in Note 2 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Factors Affecting Future Operating Results

This Annual Report on Form 10-K contains, in addition to historical information, forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, including information relating to our ability to maintain profitability, information with respect to market acceptance of our BIS system, continued growth in sales of our BIS monitors, original equipment manufacturer products and BIS Sensors, our dependence on the BIS system, regulatory approvals for our products, our ability to remain competitive and achieve future growth, information with respect to other plans and strategies for our business and factors that may influence our revenue for each fiscal quarter in 2005 and for the year ending December 31, 2005. These forward-looking statements involve risks and uncertainties and are not guarantees of future performance. Words such as “expect,” “anticipate,” “intend,” “plan,” “believe,” “seek,” “estimate” and variations of these words and similar expressions are intended to identify forward-looking statements. Our actual results could differ significantly from the results discussed in these forward-looking statements. The following important factors represent some of the current challenges to us that create risk and uncertainty. Failure to adequately overcome any of the following challenges could have a material adverse effect on our results of operations, business or financial condition. In addition, subsequent events and developments may

cause our expectations to change. While we may elect to update these forward-looking statements we specifically disclaim any obligation to do so, even if our expectations change.

We will not continue to be profitable if hospitals and anesthesia providers do not buy and use our BIS system in sufficient quantities.

Our customers may determine that the cost of the BIS system exceeds cost savings in drugs, personnel and post-anesthesia care recovery resulting from use of the BIS system. In addition, hospitals and anesthesia providers may not accept the BIS system as an accurate means of assessing a patient's level of consciousness during surgery or in the intensive care unit. If extensive or frequent malfunctions occur, healthcare providers may also conclude that the BIS system is unreliable. If hospitals and anesthesia providers do not accept the BIS system as cost-effective, accurate and reliable, they will not buy and use the BIS system in sufficient quantities to enable us to continue to be profitable.

The success of our business also depends in a large part on continued use of the BIS system by our customers and, accordingly, sales by us of BIS Sensors. We expect that over time, sales of BIS Sensors will increase as a percentage of our revenue as compared to sales of Equipment as we build our installed base of monitors and modules. If use of our BIS system, and accordingly, sales of our BIS Sensors, do not increase, our ability to grow our revenue could be adversely affected.

We depend on our BIS system for substantially all of our revenue, and if the BIS system does not gain widespread market acceptance, then our revenue will not grow.

We began selling our current BIS system in early 1998 and introduced the latest version, the BIS XP system, at the end of the third fiscal quarter of 2001. In 2002, we introduced commercially the BIS Extend Sensor for patients who are monitored over an extended period of time, such as in intensive care unit settings. To date, we have not achieved widespread market acceptance of the BIS system for use in the operating room or in the intensive care unit from healthcare providers or professional anesthesia organizations. Because we depend on our BIS system for substantially all of our revenue and we have no other significant products, if we fail to achieve widespread market acceptance for the BIS system, we will not be able to sustain or grow our product revenue.

Various market factors may adversely affect our quarterly operating results through the first fiscal quarter of 2005.

Various factors may adversely affect our quarterly operating results through the first fiscal quarter of 2005. First, we continue to shift the focus of our placements from BIS monitors to original equipment manufacturer products which may lead to a reduction in Equipment revenue and gross margin on Equipment. Second, in Japan, Nihon Kohden is awaiting approval of the BIS XP system from the Japanese Ministry of Health, Labor and Welfare which may cause delays in purchasing decisions by customers in Japan, or these potential customers may choose not to purchase our products. The continuation of difficult worldwide economic conditions, reductions in hospital purchasing programs and the cost of transitioning our installed base to the BIS XP system may also adversely impact our revenue and operating results through the first fiscal quarter of 2005. Additionally, on October 7, 2004, the Joint Commission on Accreditation of Healthcare Organizations, or JCAHO, issued a Sentinel Event Alert aimed at preventing and managing the impact of anesthesia awareness. The Alert identifies the incidence of awareness, describes common underlying causes and suggests steps for healthcare professionals and institutions to take in order to manage and prevent future occurrences and recommends healthcare organizations develop and implement policies to address anesthesia awareness. While we believe this report is favorable to our business, industry organizations and others in the anesthesia community may not agree with the position taken in the Alert and, accordingly, potential benefits to our business that could have resulted from this Alert may not be realized.

Fluctuations in our quarterly operating results could cause our stock price to decrease.

Our operating results have fluctuated significantly from quarter to quarter in the past and are likely to vary in the future. These fluctuations are due to several factors relating to the sale of our products, including:

- the timing and volume of customer orders for our BIS system,
- implementation of, and our subsequent reduction on the focus of, our EP program,
- use of and demand for our BIS Sensors,
- transition of sales focus from BIS monitors to original equipment manufacturer products,
- customer cancellations,
- introduction of competitive products,
- regulatory approvals,
- changes in management,
- turnover in our direct sales force,
- effectiveness of new marketing and sales programs,
- reductions in orders by our distributors and original equipment manufacturers, and
- the timing and amount of our expenses.

Because of these fluctuations, it is likely that in some future quarter or quarters our operating results could fall below the expectations of securities analysts or investors. If our quarterly operating results are below expectations in the future, the market price of our common stock would likely decrease. In addition, because we do not have a substantial backlog of customer orders for our BIS system, revenue in any quarter depends on orders received in that quarter. Our quarterly results may also be adversely affected because some customers may have inadequate financial resources to purchase our products or may fail to pay for our products after receiving them. In particular, hospitals continue to experience financial constraints, consolidations and reorganizations as a result of cost containment measures and declining third-party reimbursement for services, which may result in decreased product orders or an increase in bad debt allowances in any quarter.

If the estimates we make, and the assumptions on which we rely in preparing our financial statements prove inaccurate, our actual results may vary from those reflected in our financial statements.

Our financial statements have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of our assets, liabilities, revenues and expenses, the amounts of charges accrued by us and related disclosure of contingent assets and liabilities. This includes estimates on warranty reserves, inventory valuations and allowances for doubtful accounts. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. There can be no assurance, however, that our estimates, or the assumptions underlying them, will be correct.

If approval of our BIS XP system is not obtained in Japan, our revenue and operating results could be adversely affected.

In Japan, Nihon Kohden is awaiting approval of the BIS XP system from the Japanese Ministry of Health, Labor and Welfare. Until approval is obtained, customers in Japan may delay their purchasing decisions with respect to our products or may decide not to purchase our products at all. As a result, if approval for this product is not obtained in Japan in the near future, or at all, it could limit the growth of our international revenue.

We may need additional financing for our future capital needs and may not be able to raise additional funds on terms acceptable to us, or at all.

We believe that the financial resources available to us, including our current working capital and available revolving lines of credit, will be sufficient to finance our planned operations and capital expenditures through at least the end of 2005. If we are unable to increase our revenue and maintain positive cash flow, we will need to raise additional funds. We may also need additional financing if:

- the research and development costs of our products currently under development increase,
- we decide to expand faster than currently planned,
- we develop new or enhanced services or products ahead of schedule,
- we decide to undertake new sales and/or marketing initiatives,
- we are required to defend or enforce our intellectual property rights,
- sales of our products do not meet our expectations domestically or internationally,
- we need to respond to competitive pressures, or
- we decide to acquire complementary products, businesses or technologies.

We can provide no assurance that we will be able to raise additional funds on terms acceptable to us, if at all. If future financing is not available or is not available on acceptable terms, we may not be able to fund our future operations which would significantly limit our ability to implement our business plan. In addition, we may have to issue securities that may have rights, preferences and privileges senior to our common stock.

Cases of awareness with recall during monitoring with the BIS system could limit market acceptance of BIS systems and could expose us to product liability claims.

Clinicians have reported to us cases of possible awareness with recall during surgical procedures monitored with the BIS system. In most of the cases that were reported to us, when BIS index values were recorded at the time of awareness, high BIS index values were noted, indicating that the BIS index correctly identified the increased risk of awareness with recall in these patients. However, in a small number of these reported cases, awareness with recall may not have been detected by monitoring with the BIS system. We have not systematically solicited reports of awareness with recall. It is possible that additional cases of awareness with recall during surgical procedures monitored with the BIS system have not been reported to us. Anesthesia providers and hospitals may elect not to purchase and use BIS systems if there is adverse publicity resulting from the report of cases of awareness with recall that were not detected during procedures monitored with the BIS system. If anesthesia providers and hospitals do not purchase and use the BIS system, then we may not sustain or grow our product revenue. Although our multi-center, multinational clinical studies have demonstrated that the use of BIS monitoring to help guide anesthetic administration may be associated with the reduction of the incidence of awareness with recall in adults using general anesthesia and sedation, we may be subject to product liability claims for cases of awareness with recall during surgical procedures monitored with the BIS system. These claims could require us to spend significant time and money in litigation or to pay significant damages. Moreover, if the patient safety benefits of BIS monitoring are not persuasive enough to lead to wider adoption of our BIS technology, our business could be adversely affected.

We may not be able to compete with new products or alternative techniques developed by others, which could impair our ability to remain competitive and achieve future growth.

The medical device industry in which we market our products is characterized by rapid product development and technological advances. Our competitors have introduced commercially anesthesia monitoring products which have been cleared by the United States Food and Drug Administration, or FDA. If we do

not compete effectively with these monitoring products, our revenue will be adversely affected. Our current or planned products are at risk of obsolescence from:

- other new monitoring products, based on new or improved technologies,
- new products or technologies used on patients or in the operating room during surgery in lieu of monitoring devices,
- electrical or mechanical interference from new or existing products or technologies,
- alternative techniques for evaluating the effects of anesthesia,
- significant changes in the methods of delivering anesthesia, and
- the development of new anesthetic agents.

We may not be able to improve our products or develop new products or technologies quickly enough to maintain a competitive position in our markets and continue to grow our business.

If we do not successfully develop and introduce enhanced or new products we could lose revenue opportunities and customers.

As the market for our BIS system matures, we need to develop and introduce new products for anesthesia monitoring or other applications. In 2002, we introduced commercially the BIS Extend Sensor for patients who are typically monitored for an extended period of time, such as in intensive care unit settings. We do not know whether the use of the BIS system in the intensive care unit will achieve market acceptance. In addition, we have begun to research the use of BIS monitoring to diagnose and track neurological diseases, and face at least the following two related risks:

- we may not successfully adapt the BIS system to function properly for procedural sedation, when used with anesthetics we have not tested or with patient populations we have not studied, such as infants, and
- our technology is complex, and we may not be able to develop it further for applications outside anesthesia monitoring, such as the diagnosis and tracking of neurological diseases.

If we do not successfully adapt the BIS system for new products and applications both within and outside the field of anesthesia monitoring, or if such products and applications are developed but not successfully commercialized, then we could lose revenue opportunities and customers.

If we do not develop and implement a successful sales and marketing strategy, we will not expand our business.

In the past, we have experienced high turnover in our direct sales force. It is possible that high turnover may occur in the future. If new sales representatives do not acquire the technological skills to sell our products in a timely and successful manner or we experience high turnover in our direct sales force, we may not be able to sustain and grow our product revenue. In addition, in order to increase our sales, we need to continue to strengthen our relationships with our international distributors and continue to add international distributors. Also, we need to continue to strengthen our relationships with our original equipment manufacturers and other sales channels and increase sales through these channels. On an ongoing basis, we develop and introduce new sales and marketing programs and clinical education programs to promote the use of the BIS system by our customers. If we do not implement these new sales and marketing and education programs in a timely and successful manner, we may not be able to achieve the level of market awareness and sales required to expand our business. We have only limited sales and marketing experience both in the United States and internationally and may not be successful in developing and implementing our strategy. Among other things, we need to:

- provide or assure that distributors and original equipment manufacturers provide the technical and educational support customers need to use the BIS system successfully,

- promote frequent use of the BIS system so that sales of our disposable BIS Sensors increase,
- establish and implement successful sales and marketing and education programs that encourage our customers to purchase our products or the products that are made by original equipment manufacturers incorporating our technology,
- manage geographically dispersed operations, and
- modify our products and marketing and sales programs for foreign markets.

Our third-party distribution and original equipment manufacturer relationships could negatively affect our profitability, cause sales of our products to decline and be difficult to terminate if we are dissatisfied.

Sales through distributors could be less profitable than direct sales. Sales of our products through multiple channels could also confuse customers and cause the sale of our products to decline. We do not control our original equipment manufacturers and distribution partners. Our partners could sell competing products, may not incorporate our technology into their products in a timely manner and may devote insufficient sales efforts to our products. In addition, our partners are generally not required to purchase minimum quantities. As a result, even if we are dissatisfied with the performance of our partners, we may be unable to terminate our agreements with these partners or enter into alternative arrangements.

We may not be able to generate enough additional revenue from our international expansion to offset the costs associated with establishing and maintaining foreign operations.

A component of our growth strategy is to expand our presence in international markets. We conduct international business primarily in Europe and Japan and we are attempting to increase the number of countries in which we do business. It is costly to establish international facilities and operations and to promote the BIS system in international markets. We have encountered barriers to the sale of our BIS system outside the United States, including less acceptance by anesthesia providers for use of disposable products, such as BIS Sensors, delays in regulatory approvals outside of the United States, particularly in Japan, and difficulties selling through indirect sales channels. In addition, we have little experience in marketing and distributing products in these markets. Revenue from international activities may not offset the expense of establishing and maintaining these international operations.

We may not be able to meet the unique operational, legal and financial challenges that we will encounter in our international operations, which may limit the growth of our business.

We are increasingly subject to a number of challenges which specifically relate to our international business activities. These challenges include:

- failure of local laws to provide adequate protection against infringement of our intellectual property,
- protectionist laws and business practices that favor local competitors, which could slow our growth in international markets,
- difficulties in terminating or modifying distributor arrangements because of restrictions in markets outside the United States,
- less acceptance by foreign anesthesia providers of the use of disposable products, such as BIS Sensors,
- delays in regulatory approval of our products,

- currency conversion issues arising from sales denominated in currencies other than the United States dollar,
- foreign currency exchange rate fluctuations,
- longer sales cycles to sell products like the BIS system to hospitals and outpatient surgical centers, which could slow our revenue growth from international sales, and
- longer accounts receivable payment cycles and difficulties in collecting accounts receivable.

If we are unable to meet and overcome these challenges, our international operations may not be successful which would limit the growth of our business and could adversely impact our results of operations.

We may experience customer dissatisfaction and our reputation could suffer if we fail to manufacture enough products to meet our customers' demands.

We rely on third-party manufacturers to assemble and manufacture the components of our BIS monitors, original equipment manufacturer products and a portion of our BIS Sensors. We manufacture substantially all BIS Sensors in our own manufacturing facility. We have only one manufacturing facility. If we fail to produce enough products at our own manufacturing facility or at a third-party manufacturing facility for any reason, including damage or destruction of our facility, or experience a termination or modification of any manufacturing arrangement with a third party, we may be unable to deliver products to our customers on a timely basis. Our failure to deliver products on a timely basis could lead to customer dissatisfaction and damage our reputation.

Our reliance on sole-source suppliers could adversely affect our ability to meet our customers' demands for our products in a timely manner or within budget.

Some of the components that are necessary for the assembly of our BIS system, including some of the components used in our BIS Sensors, are currently provided to us by sole-source suppliers or a limited group of suppliers. We purchase components through purchase orders rather than long-term supply agreements and generally do not maintain large volumes of inventory. We have experienced shortages and delays in obtaining some of the components of our BIS systems in the past, and we may experience similar shortages or delays in the future. The disruption or termination of the supply of components could cause a significant increase in the costs of these components, which could affect our profitability. A disruption or termination in the supply of components could also result in our inability to meet demand for our products, which could lead to customer dissatisfaction and damage our reputation. If a supplier is no longer willing or able to manufacture components that we purchase and integrate into the BIS system, we may attempt to design replacement components ourselves that would be compatible with our existing technology. In doing so, we would incur additional research and development expenses, and there can be no assurance that we would be successful in designing or manufacturing any replacement components. Furthermore, if we are required to change the manufacturer of a key component of the BIS system, we may be required to verify that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations and guidelines. The delays associated with the verification of a new manufacturer could delay our ability to manufacture BIS systems in a timely manner or within budget.

We may be required to bring litigation to enforce our intellectual property rights, which may result in substantial expense and may divert our attention from the implementation of our business strategy.

We believe that the success of our business depends, in part, on obtaining patent protection for our products, defending our patents once obtained and preserving our trade secrets. We rely on a combination of contractual provisions, confidentiality procedures and patent, trademark and trade secret laws to protect the proprietary aspects of our technology. These legal measures afford only limited protection, and competitors may gain access to our intellectual property and proprietary information. Litigation may be necessary to enforce our intellectual property rights, to protect our trade secrets and to determine the validity and scope of

our proprietary rights. Any litigation could result in substantial expense and diversion of our attention from the growth of the business and may not be adequate to protect our intellectual property rights.

We may be sued by third parties which claim that our products infringe on their intellectual property rights, particularly because there is substantial uncertainty about the validity and breadth of medical device patents.

We may be exposed to litigation by third parties based on claims that our products infringe the intellectual property rights of others. This risk is exacerbated by the fact that the validity and breadth of claims covered in medical technology patents involve complex legal and factual questions for which important legal principles are unresolved. Any litigation or claims against us, whether or not valid, could result in substantial costs, could place a significant strain on our financial resources and could harm our reputation. In addition, intellectual property litigation or claims could force us to do one or more of the following:

- cease selling, incorporating or using any of our products that incorporate the challenged intellectual property, which would adversely affect our revenue,
- obtain a license from the holder of the infringed intellectual property right, which license may not be available on reasonable terms, if at all, and
- redesign our products, which may be costly and time-consuming.

We could be exposed to significant product liability claims which could divert management attention and adversely affect our cash balances, our ability to obtain and maintain insurance coverage at satisfactory rates or in adequate amounts and our reputation.

The manufacture and sale of our products expose us to product liability claims and product recalls, including those which may arise from misuse or malfunction of, or design flaws in, our products or use of our products with components or systems not manufactured or sold by us. Product liability claims or product recalls, regardless of their ultimate outcome, could require us to spend significant time and money in litigation or to pay significant damages. We currently maintain product liability insurance; however, it may not cover the costs of any product liability claims made against us. Furthermore, we may not be able to obtain insurance in the future at satisfactory rates or in adequate amounts. In addition, publicity pertaining to the misuse or malfunction of, or design flaws in, our products could impair our ability to successfully market and sell our products.

Several class action lawsuits have been filed against the underwriters of our initial public offering which may result in negative publicity and potential litigation against us that would be costly to defend and the outcome of which is uncertain and may harm our business.

The underwriters of our initial public offering are named as defendants in several class action complaints which have been filed allegedly on behalf of certain persons who purchased shares of our common stock between January 28, 2000 and December 6, 2000. These complaints allege violations of the Securities Act of 1933 and the Securities Exchange Act of 1934. Primarily they allege that there was undisclosed compensation received by our underwriters in connection with our initial public offering. While we and our officers and directors have not been named as defendants in these suits, based on comparable lawsuits filed against other companies, there can be no assurance that we and our officers and directors will not be named in similar complaints in the future. In addition, the underwriters may assert that we are liable for some or all of any liability that they are found to have to the plaintiffs, pursuant to the indemnification provisions of the underwriting agreement we entered into as part of the initial public offering, or otherwise.

We can provide no assurance as to the outcome of these complaints or any potential suit against us or our officers and directors. Any conclusion of these matters in a manner adverse to us could have a material adverse affect on our financial position and results of operations. In addition, the costs to us of defending any litigation or other proceeding, even if resolved in our favor, could be substantial. Such litigation could also substantially divert the attention of our management and our resources in general. Even if we are not named as defendants

in these lawsuits, we may also be required to incur significant costs and our management may be distracted by being required to provide information, documents or testimony in connection with the actions against our underwriters. Uncertainties resulting from the initiation and continuation of any litigation or other proceedings and the negative publicity associated with this litigation could harm our ability to compete in the marketplace.

Boston Scientific Corporation may be able to affect corporate actions requiring stockholder approval because it owns a significant amount of our common stock, and, if our strategic alliance with Boston Scientific Corporation is not successful, our operating results could be adversely affected.

As of March 1, 2005, Boston Scientific Corporation owned approximately 24% of our outstanding common stock, which includes 500,000 shares of our common stock that we sold to Boston Scientific Corporation on June 8, 2004. If Boston Scientific Corporation maintains or increases its ownership of our outstanding common stock, it may have the ability to affect corporate actions requiring stockholder approval. On August 7, 2002, we formed a strategic alliance with Boston Scientific Corporation. In connection with this strategic alliance, we entered into an agreement pursuant to which we granted Boston Scientific Corporation an option to distribute newly developed technology for monitoring patients under sedation in a range of less-invasive medical specialties. If such products are not successfully developed, marketed and sold under the agreement in a manner consistent with our expectations, the growth of our business and our operating results will be adversely affected. Even if we successfully develop new sedation management technology for less-invasive medical procedures, Aspect and Boston Scientific Corporation may not successfully market and sell this new technology.

We may not reserve amounts adequate to cover product obsolescence, claims and returns, which could result in unanticipated expenses and fluctuations in operating results.

Depending on factors such as the timing of our introduction of new products which utilize our BIS technology, as well as warranty claims and product returns, we may need to reserve amounts in excess of those currently reserved for product obsolescence, excess inventory, warranty claims and product returns. These reserves may not be adequate to cover all costs associated with these items. If these reserves are inadequate, we would be required to incur unanticipated expenses which could result in unexpected fluctuations in quarterly operating results.

We may not be able to compete effectively, which could result in price reductions and decreased demand for our products.

We are facing increased competition in the domestic level of consciousness monitoring market as a result of a number of competitors' monitoring systems which have been cleared by the FDA. These products are marketed by well-established medical products companies with significant resources. We may not be able to compete effectively with these and other potential competitors. We may also face substantial competition from companies which may develop sensor products that compete with our proprietary BIS Sensors for use with our BIS monitors or with third-party monitoring systems or anesthesia delivery systems that incorporate the BIS index. We also expect to face competition from companies currently marketing conventional electroencephalogram, or EEG, monitors using standard and novel signal-processing techniques. Other companies may develop anesthesia-monitoring systems that perform better than the BIS system and/or sell for less. In addition, one or more of our competitors may develop products that are substantially equivalent to our FDA-approved products, in which case they may be able to use our products as predicate devices to more quickly obtain FDA approval of their competing products. Medical device companies developing these and other competitive products may have greater financial, technical, marketing and other resources than we do. Competition in the sale of anesthesia-monitoring systems could result in price reductions, fewer orders, reduced gross margins and loss of market share.

Our ability to market and sell our products and generate revenue depends upon receipt of domestic and foreign regulatory approval of our products and manufacturing operations.

Before we can market new products in the United States, we must obtain clearance from the FDA. If the FDA concludes that any of our products do not meet the requirements to obtain clearance of a premarket notification under Section 510(k) of the Food, Drug and Cosmetic Act, then we would be required to file a premarket approval application. The premarket approval application process is lengthy, expensive and typically requires extensive preclinical and clinical trial data. We may not obtain clearance of a 510(k) notification or approval of a premarket approval application with respect to any of our products on a timely basis, if at all. If we fail to obtain timely clearance or approval for our products, we will not be able to market and sell our products, which will limit our ability to generate revenue. We may also be required to obtain clearance of a 510(k) notification from the FDA before we can market certain previously marketed products which we modify after they have been cleared. We have made certain enhancements to our currently marketed products which we have determined do not necessitate the filing of a new 510(k) notification. However, if the FDA does not agree with our determination, it will require us to file a new 510(k) notification for the modification and we may be prohibited from marketing the modified device until we obtain FDA clearance.

The FDA also requires us to adhere to current Good Manufacturing Practices regulations, which include production design controls, testing, quality control, storage and documentation procedures. The FDA may at any time inspect our facilities to determine whether adequate compliance has been achieved. Compliance with current Good Manufacturing Practices regulations for medical devices is difficult and costly. In addition, we may not continue to be compliant as a result of future changes in, or interpretations of, regulations by the FDA or other regulatory agencies. If we do not achieve continued compliance, the FDA may withdraw marketing clearance or require product recall. When any change or modification is made to a device or its intended use, the manufacturer may be required to reassess compliance with current Good Manufacturing Practices regulations, which may cause interruptions or delays in the marketing and sale of our products.

Sales of our products outside the United States are subject to foreign regulatory requirements that vary from country to country. The time required to obtain approvals from foreign countries may be longer than that required for FDA approval, and requirements for foreign licensing may differ from FDA requirements.

The federal, state and foreign laws and regulations regarding the manufacture and sale of our products are subject to future changes, as are administrative interpretations of regulatory agencies. If we fail to comply with applicable federal, state or foreign laws or regulations, we could be subject to enforcement actions, including product seizures, recalls, withdrawal of clearances or approvals and civil and criminal penalties.

If we do not retain our senior management and other key employees, we may not be able to successfully implement our business strategy.

Our president and chief executive officer, Nassib Chamoun, joined us at our inception in 1987. Our chairman, J. Breckenridge Eagle, began serving as a director in 1988. Many other members of our management and key employees have extensive experience with us and other companies in the medical device industry. Our success is substantially dependent on the ability, experience and performance of these members of our senior management and other key employees. Because of their ability and experience, if we lose one or more of the members of our senior management or other key employees, our ability to successfully implement our business strategy could be seriously harmed.

If we do not attract and retain skilled personnel, we will not be able to expand our business.

Our products are based on complex signal-processing technology. Accordingly, we require skilled personnel to develop, manufacture, sell and support our products. Our future success will depend largely on our ability to continue to hire, train, retain and motivate additional skilled personnel, particularly sales representatives who are responsible for customer education and training and post-installation customer support. Consequently, if we are not able to attract and retain skilled personnel, we will not be able to expand our business.

Failure of users of the BIS system to obtain adequate reimbursement from third-party payors could limit market acceptance of the BIS system, which could prevent us from sustaining profitability.

Anesthesia providers are generally not reimbursed separately for patient monitoring activities utilizing the BIS system. For hospitals and outpatient surgical centers, when reimbursement is based on charges or costs, patient monitoring with the BIS system may reduce reimbursements for surgical procedures, because charges or costs may decline as a result of monitoring with the BIS system. Failure by hospitals and other users of the BIS system to obtain adequate reimbursement from third-party payors, or any reduction in the reimbursement by third-party payors to hospitals and other users as a result of using the BIS system could limit market acceptance of the BIS system, which could prevent us from achieving profitability.

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

Interest Rate Exposure

Our investment portfolio consists primarily of high-grade commercial paper, high grade corporate bonds and debt obligations of various governmental agencies. We manage our investment portfolio in accordance with our investment policy. The primary objectives of our investment policy are to preserve principal, maintain a high degree of liquidity to meet operating needs, and obtain competitive returns subject to prevailing market conditions. Investments are made with an average maturity of 12 months or less and a maximum maturity of 24 months. These investments are subject to risk of default, changes in credit rating and changes in market value. These investments are also subject to interest rate risk and will decrease in value if market interest rates increase. Due to the conservative nature of our investments and relatively short effective maturities of the debt instruments, we believe interest rate risk is mitigated. Our investment policy specifies the credit quality standards for our investments and limits the amount of exposure from any single issue, issuer or type of investment.

Our investment in sales-type leases, line of credit agreements and sales-type lease debt agreements are also subject to market risk. The interest rates implicit in our sales-type leases and on our sales-type lease debt agreements are fixed and not subject to interest rate risk. The interest rates on our line of credit agreements are variable and subject to interest rate risk. The interest rate risk related to the lines of credit is mitigated primarily by the fact that the lines of credit, when drawn on, are generally outstanding for short periods of time in order to fund short-term cash requirements.

Foreign Currency Exposure

Most of our revenue, expenses and capital spending are transacted in U.S. dollars. The expenses and capital spending of our two international subsidiaries are transacted in the respective country's local currency and subject to foreign currency exchange rate risk. Our foreign currency transactions are translated into U.S. dollars at prevailing rates. Gains or losses resulting from foreign currency transactions are included in current period income or loss as incurred. Currently, all material transactions are denominated in U.S. dollars, and we have not entered into any material transactions that are denominated in foreign currencies.

Item 8. Financial Statements and Supplementary Data.

The information required by this item may be found on pages F-1 through F-28 of this Annual Report on Form 10-K.

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

None.

Item 9A. Controls and Procedures.

1. Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2004. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company 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 are recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of December 31, 2004, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

No change in our internal controls over financial reporting occurred during the fiscal quarter ended December 31, 2004 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

2. Internal Control over Financial Reporting.

(a) Management's Report on the Effectiveness of Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) or 15d-15(f) promulgated under the Securities Exchange Act of 1934 as 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:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect our transactions and dispositions of our assets;
- 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
- 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.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of the company's internal control over financial reporting as of December 31, 2004. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework*.

Based on our assessment, management believes that, as of December 31, 2004, our internal control over financial reporting is effective based on those criteria.

Our independent registered public accounting firm has issued an audit report on our assessment of the company's internal control over financial reporting. This report appears below.

(b) *Attestation Report of the Independent Registered Public Accounting Firm.*

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of Aspect Medical Systems, Inc.

We have audited management's assessment, included in the accompanying Management's Report on the Effectiveness of Internal Control Over Financial Reporting, that Aspect Medical Systems, Inc. (the "Company") maintained effective internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Aspect Medical Systems Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that Aspect Medical Systems, Inc. maintained effective internal control over financial reporting as of December 31, 2004 is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, Aspect Medical Systems, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Aspect Medical Systems, Inc. as of December 31, 2004 and 2003, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2004 and our report dated March 10, 2005 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Boston, Massachusetts
March 10, 2005

(c) Changes in Internal Control over Financial Reporting.

No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act) occurred during the fiscal quarter ended December 31, 2004 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

Not applicable.

PART III

Item 10. Directors and Executive Officers of the Registrant.

The information with respect to directors and executive officers required under this item is incorporated by reference to the information set forth under the section entitled "*Election of Directors*" in our proxy statement for our 2005 Annual Meeting of Stockholders to be held on May 25, 2005. Information relating to certain filings of Forms 3, 4 and 5 is contained in our 2005 proxy statement under the section entitled "*Section 16(a) Beneficial Ownership Reporting Compliance*" and is incorporated herein by reference.

The information required under this item pursuant to Item 401 (h) and 401 (i) of Regulation S-K relating to an Audit Committee financial expert and identification of the Audit Committee of our Board of Directors is contained in our 2005 proxy statement under the caption "*Corporate Governance*" and is incorporated herein by reference.

We have adopted a written code of business conduct and ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Our Code of Business Conduct and Ethics is posted on our website. We intend to disclose any amendments to, or waivers from, our code of business conduct and ethics on our website which is located at www.aspectmedical.com.

Item 11. Executive Compensation.

The information required under this item is incorporated by reference to the sections entitled "*Information About Executive Compensation*," "*Compensation of Directors*" and "*Compensation Committee Interlocks and Insider Participation*" in our 2005 proxy statement.

The sections entitled "*Report of the Compensation Committee*" and "*Comparative Stock Performance Graph*" in our 2005 proxy statement are not incorporated herein by reference.

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

The information required under this item is incorporated by reference to the section entitled "*Stock Ownership Information*" and "*Securities Authorized for Issuance Under Equity Compensation Plans*" in our 2005 proxy statement.

Item 13. Certain Relationships and Related Transactions.

The information required under this item is incorporated by reference to the section entitled "*Certain Relationships and Related Transactions*" in our 2005 proxy statement.

Item 14. Principal Accountant Fees and Services.

The information required under this item is incorporated by reference to the section entitled "*Independent Auditors Fees and Other Matters*" in our 2005 proxy statement.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a) Consolidated Financial Statements.

For a list of the consolidated financial information included herein, see Index to the Consolidated Financial Statements on page F-1 of this Annual Report on Form 10-K.

(b) List of Exhibits.

The exhibits listed in the Exhibit Index immediately preceding the exhibits are filed as part of this Annual Report on Form 10-K.

(c) Financial Statement Schedules.

All schedules have been omitted because the information required to be set forth therein is not applicable or is shown in the accompanying Consolidated Financial Statements or notes thereto.

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: March 15, 2005

ASPECT MEDICAL SYSTEMS, INC.

By: /s/ MICHAEL FALVEY

Michael Falvey
Vice President and Chief Financial Officer

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ <u>NASSIB G. CHAMOUN</u> Nassib G. Chamoun	President, Chief Executive Officer and Director (Principal Executive Officer)	March 15, 2005
/s/ <u>J. BRECKENRIDGE EAGLE</u> J. Breckenridge Eagle	Chairman of the Board of Directors	March 15, 2005
/s/ <u>MICHAEL FALVEY</u> Michael Falvey	Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	March 15, 2005
/s/ <u>BOUDEWIJN L.P.M. BOLLEN</u> Boudewijn L.P.M. Bollen	President of International Operations and Director	March 15, 2005
/s/ <u>DAVID W. FEIGAL, JR., M.D.</u> David W. Feigal, Jr., M.D.	Director	March 15, 2005
/s/ <u>EDWIN M. KANIA</u> Edwin M. Kania	Director	March 15, 2005
/s/ <u>JAMES J. MAHONEY, JR.</u> James J. Mahoney, Jr.	Director	March 15, 2005
/s/ <u>RICHARD J. MEELIA</u> Richard J. Meelia	Director	March 15, 2005
/s/ <u>DONALD R. STANSKI, M.D.</u> Donald R. Stanski, M.D.	Director	March 15, 2005

ASPECT MEDICAL SYSTEMS, INC.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of
Aspect Medical Systems, Inc.

We have audited the accompanying consolidated balance sheets of Aspect Medical Systems Inc. as of December 31, 2004 and 2003, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2004. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Aspect Medical Systems, Inc. at December 31, 2004 and 2003, and the consolidated results of its operations and cash flows for each of the three years in the period ended December 31, 2004, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Aspect Medical Systems, Inc.'s internal control over financial reporting as of December 31, 2004, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 10, 2005 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Boston, Massachusetts
March 10, 2005

ASPECT MEDICAL SYSTEMS, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	<u>December 31,</u> <u>2004</u>	<u>December 31,</u> <u>2003</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 14,761	\$ 12,344
Restricted cash	82	5,100
Short-term investments	17,452	13,718
Accounts receivable, net of allowances of \$41 and \$150 at December 31, 2004 and 2003, respectively	7,835	5,773
Current portion of investment in sales-type leases	1,698	1,797
Inventory, net	2,224	1,515
Other current assets	<u>1,192</u>	<u>1,147</u>
Total current assets	45,244	41,394
Property and equipment, net	2,662	2,996
Long-term investments	11,439	—
Long-term investment in sales-type leases	2,320	2,613
Long-term portion of notes receivable from related parties	<u>25</u>	<u>737</u>
Total assets	<u>\$ 61,690</u>	<u>\$ 47,740</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term debt	\$ 311	\$ 679
Accounts payable	1,920	1,189
Accrued liabilities	7,832	7,871
Deferred revenue	<u>957</u>	<u>975</u>
Total current liabilities	11,020	10,714
Long-term portion of deferred revenue	4,898	5,533
Long-term debt	186	525
Commitments and contingencies (Note 13)		
Stockholders' equity:		
Preferred stock, \$.01 par value; 5,000,000 shares authorized, no shares issued or outstanding	—	—
Common stock, \$.01 par value; 60,000,000 shares authorized, 20,838,611 and 19,502,079 shares issued and outstanding at December 31, 2004 and 2003, respectively	208	195
Additional paid-in capital	145,429	131,131
Notes receivable from employees and directors	—	(78)
Accumulated other comprehensive loss	(78)	(4)
Accumulated deficit	<u>(99,973)</u>	<u>(100,276)</u>
Total stockholders' equity	45,586	30,968
Total liabilities and stockholders' equity	<u>\$ 61,690</u>	<u>\$ 47,740</u>

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

ASPECT MEDICAL SYSTEMS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)

	Year Ended December 31,		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
Revenue	\$55,564	\$44,091	\$ 39,776
Costs of revenue	<u>12,992</u>	<u>10,898</u>	<u>11,815</u>
Gross profit margin	42,572	33,193	27,961
Operating expenses:			
Research and development	7,470	7,287	7,827
Sales and marketing	26,776	25,321	28,449
General and administrative	<u>8,946</u>	<u>7,833</u>	<u>7,942</u>
Total operating expenses	<u>43,192</u>	<u>40,441</u>	<u>44,218</u>
Loss from operations	(620)	(7,248)	(16,257)
Interest income	1,029	924	1,199
Interest expense	<u>(106)</u>	<u>(199)</u>	<u>(243)</u>
Net income (loss)	<u>\$ 303</u>	<u>\$(6,523)</u>	<u>\$(15,301)</u>
Net income (loss) per share:			
Basic	\$ 0.02	\$ (0.34)	\$ (0.83)
Diluted	\$ 0.01	\$ (0.34)	\$ (0.83)
Weighted average shares used in computing net income (loss) per share:			
Basic	20,142	19,413	18,450
Diluted	22,286	19,413	18,450

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

ASPECT MEDICAL SYSTEMS, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)

	Comprehensive Income (Loss)	Common Stock Shares	Par Value	Additional Paid-in Capital	Notes Receivable From Employees and Directors	Deferred Compensation	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
Balance, December 31, 2001		17,792	\$178	\$126,656	\$(336)	\$(23)	\$34	\$(78,452)	\$48,057
Issuance of common stock in connection with strategic alliance, net of issuance costs of approximately \$170,000		1,429	14	3,516					3,530
Issuance of common stock upon exercise of common stock options		150	2	427					429
Payments on notes receivable from employees and directors					65				65
Deferred compensation related to stock options				8		(8)			
Amortization of deferred compensation related to stock options						31			31
Comprehensive loss:									
Net loss	(15,301)							(15,301)	(15,301)
Other comprehensive loss — Unrealized loss on marketable securities	(13)						(13)		(13)
Comprehensive loss:	\$(15,314)								
Balance, December 31, 2002		19,371	\$194	\$130,607	\$(271)	\$—	\$21	\$(93,753)	\$36,798
Issuance of common stock upon exercise of common stock options		131	1	497					498
Payments on notes receivable from employees and directors					193				193
Deferred compensation related to stock options				27		(27)			
Amortization of deferred compensation related to stock options						27			27
Comprehensive loss:									
Net loss	(6,523)							(6,523)	(6,523)
Other comprehensive loss — Unrealized loss on marketable securities	(25)						(25)		(25)
Comprehensive loss:	\$(6,548)								
Balance, December 31, 2003		19,502	\$195	\$131,131	\$(78)	\$—	\$(4)	\$(100,276)	\$30,968

ASPECT MEDICAL SYSTEMS, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY — (Continued)
(in thousands)

	Comprehensive Income (Loss)	Common Stock Par Value	Additional Paid-in Capital	Notes Receivable From Employees and Directors	Deferred Compensation	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
Issuance of common stock in connection with strategic alliance	\$ —	500	\$ 8,100	\$ —	\$ —	\$ —	\$ —	\$ 8,105
Issuance of common stock upon exercise of common stock options	—	836	6,116	—	—	—	—	6,124
Issuance of common stock awards	—	1	16	—	—	—	—	16
Payments on notes receivable from employees and directors	—	—	—	78	—	—	—	78
Deferred compensation related to stock options	—	—	61	—	(61)	—	—	—
Amortization of deferred compensation related to stock options	—	—	5	—	61	—	—	66
Comprehensive income:								
Net income	303	—	—	—	—	—	303	303
Other comprehensive loss — Unrealized loss on marketable securities	(74)	—	—	—	—	(74)	—	(74)
Comprehensive income:	\$ 229	—	—	—	—	—	—	—
Balance, December 31, 2004		20,839	\$208	\$145,429	\$ —	\$ (78)	\$ (99,973)	\$ 45,586

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

ASPECT MEDICAL SYSTEMS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2004	2003	2002
Cash flows from operating activities:			
Net income (loss)	\$ 303	\$ (6,523)	\$(15,301)
Adjustments to reconcile net income (loss) to net cash used for operating activities:			
Depreciation and amortization	1,509	1,993	2,620
Credit to allowance for doubtful accounts	(39)	(237)	(100)
Compensation expense related to stock options	66	27	31
Changes in assets and liabilities —			
(Increase) decrease in accounts receivable	(2,023)	(870)	829
(Increase) decrease in inventory	(709)	819	2,775
(Increase) decrease in other assets	(67)	89	(96)
Decrease (increase) in investment in sales-type leases	392	(268)	(734)
Increase (decrease) in accounts payable	731	(58)	(318)
(Decrease) increase in accrued liabilities	(39)	744	(309)
(Decrease) increase in deferred revenue	<u>(654)</u>	<u>(898)</u>	<u>5,888</u>
Net cash used for operating activities	<u>(530)</u>	<u>(5,182)</u>	<u>(4,715)</u>
Cash flows from investing activities:			
Loans to related parties	—	—	(50)
Payments on loans to related parties	734	379	99
Acquisition of property and equipment	(1,175)	(868)	(1,046)
Decrease in restricted cash	5,018	—	—
Purchases of marketable securities	(40,056)	(17,346)	(21,601)
Proceeds from sales and maturities of marketable securities	<u>24,810</u>	<u>23,825</u>	<u>23,399</u>
Net cash (used for) provided by investing activities	<u>(10,669)</u>	<u>5,990</u>	<u>801</u>
Cash flows from financing activities:			
Payment on working capital line of credit	—	—	(3,000)
Proceeds from sale of investment in sales-type leases	—	266	1,073
Principal payments on debt related to investment in sales-type leases	(707)	(965)	(964)
Proceeds from issuance of common stock	14,245	499	3,958
Payments received on notes receivable from employees and directors	<u>78</u>	<u>193</u>	<u>65</u>
Net cash provided by (used for) financing activities	<u>13,616</u>	<u>(7)</u>	<u>1,132</u>
Net increase (decrease) in cash and cash equivalents	2,417	801	(2,782)
Cash and cash equivalents, beginning of period	<u>12,344</u>	<u>11,543</u>	<u>14,325</u>
Cash and cash equivalents, end of period	<u>\$ 14,761</u>	<u>\$ 12,344</u>	<u>\$ 11,543</u>
Supplemental disclosure of cash flow information:			
Interest paid	<u>\$ 105</u>	<u>\$ 192</u>	<u>\$ 242</u>

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

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(tabular amounts in thousands, except per share amounts)

(1) Description of Operations

Aspect Medical Systems, Inc. and its subsidiaries (the "Company") develop, manufacture and market an anesthesia monitoring system called the BIS[®] system. The BIS system provides information that allows clinicians to better assess and manage a patient's level of consciousness in the operating room and intensive care settings and administer the amount of anesthesia needed by each patient. The Company's BIS system incorporates the Company's proprietary disposable BIS Sensors and the Company's BIS monitor or original equipment manufacturers' products, including the BIS Module Kit and BISx. The Company's latest generation BIS monitor, the A-2000[®] BIS Monitor, was cleared for marketing by the United States Food and Drug Administration ("FDA") in February 1998. The Company's latest version of the BIS system, the BIS XP system, was cleared for marketing by the FDA in June 2001. The BIS system is based on the Company's patented core technology, the BIS index.

The Company had net income of approximately \$303,000 for the year ended December 31, 2004 and incurred net losses of approximately \$6,523,000 and \$15,301,000 for the years ended December 31, 2003, and 2002, respectively. At December 31, 2004, the Company had an accumulated deficit of approximately \$99,974,000. The principal risks that may affect the business, results of operations and financial condition of the Company include the Company's ability to effectively market and sell the Company's products, market acceptance of the Company's technology and products, the Company's ability to raise sufficient capital to fund operations, limited sales and marketing experience, the reliance on a single product family, manufacturing risks, the dependence on single source or limited suppliers, technological risks and other risks.

(2) Summary of Significant Accounting Policies

A summary of the significant accounting policies used by the Company in the preparation of its consolidated financial statements follows:

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated.

Foreign Currency

The functional currency of the Company's international subsidiaries is the U.S. dollar. Foreign currency transaction gains and losses are recorded in the consolidated statements of operations and have not been material.

Cash, Cash Equivalents and Marketable Securities

The Company invests its excess cash in money market accounts, certificates of deposit, high-grade commercial paper, high grade corporate bonds and debt obligations of various government agencies. The Company considers all highly liquid debt instruments purchased with an original maturity of three months or less to be cash equivalents.

The Company accounts for its investments in accordance with Statement of Financial Accounting Standards ("SFAS") No. 115, *Accounting for Certain Investments in Debt and Equity Securities*. In accordance with SFAS No. 115, the Company has classified all of its investments as available-for-sale at December 31, 2004 and 2003. The investments are reported at fair value, with any unrealized gains and losses excluded from earnings and reported as a separate component of stockholders' equity as accumulated other comprehensive income (loss). Investments that have contractual maturities of more than twelve months are included in long-term investments in the accompanying consolidated balance sheets.

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

Revenue Recognition

The Company sells its BIS monitors primarily through a combination of a direct sales force and distributors. The Company sells its BIS Module Kits to original equipment manufacturers who in turn sell them to the end-user. BIS Sensors are sold through a combination of a direct sales force, distributors and original equipment manufacturers. Direct product sales are structured as sales, sales-type lease arrangements or sales under the Company's Equipment Placement ("EP") program. Sales, sales-type lease agreements and sales under the EP program are subject to the Company's standard terms and conditions of sale and do not include any customer acceptance criteria, installation or other post shipment obligations (other than warranty) or any rights of return. The Company's BIS monitor is a standard product and does not require installation as it can be operated with the instructions included in the operator's manual.

The Company recognizes revenue from product sales when earned in accordance with Staff Accounting Bulletin ("SAB") No. 104, *Revenue Recognition*, and Emerging Issues Task Force ("EITF") 00-21, *Revenue Arrangements with Multiple Deliverables*. Revenue is recognized when persuasive evidence of an arrangement exists, product delivery has occurred or services have been rendered, the price is fixed or determinable and collectibility is reasonably assured. For product sales, revenue is not recognized until title and risk of loss have transferred to the customer. The Company's revenue arrangements with multiple elements are divided into separate units of accounting if specified criteria are met, including whether the delivered element has stand-alone value to the customer and whether there is objective and reliable evidence of the fair value of the undelivered items. The consideration received is allocated among the separate units based on their respective fair values, and the applicable revenue recognition criteria are applied to each of the separate units.

The Company follows SFAS No. 13, *Accounting For Leases*, for its sales-type lease agreements. Under the Company's sales-type leases, customers purchase BIS Sensors and the BIS monitor for the purchase price of the BIS Sensors plus an additional charge per BIS Sensor to pay for the purchase price of the BIS monitor and related financing costs over the term of the agreement. In accordance with SFAS No. 13, the minimum lease payment, consisting of the additional charge per BIS Sensor, less the unearned interest income, which is computed at the interest rate implicit in the lease, is recorded as the net investment in sales-type leases. The Company recognizes equipment revenue under sales-type lease agreements either at shipment or delivery in accordance with the agreed upon contract terms with interest income recognized over the life of the sales-type lease. The cost of the BIS monitor acquired by the customer is recorded as costs of revenue in the same period.

In addition, the Company reviews and assesses the net realizability of its investment in sales-type leases at each reporting period. This review includes determining, on a customer specific basis, if a customer is significantly underperforming relative to the customer's cumulative level of committed BIS Sensor purchases as required by the sales-type lease agreement. If a customer is underperforming, the Company records an allowance for lease payments as a charge to revenue to reflect the lower estimate of the net realizable investment in sales-type lease balance.

As of December 31, 2004, the Company does not consider any sales-type lease agreement, against which an allowance for lease payments has been established, an impaired asset.

Under the Company's EP program, the customer is granted the right to use the BIS monitors for a mutually agreed upon period of time. During this period, the customer purchases BIS Sensors at a price that typically includes a premium above the list price of the BIS Sensors to cover the rental of the equipment, but without any minimum purchase commitments. At the end of the agreed upon period, the customer has the option of purchasing the BIS monitors, continuing to use them under the EP program or returning them to the Company. Under the EP program, no equipment revenue is recognized as the equipment remains the Company's property and title does not pass to the customer, and the criteria for sales-type leases under

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued) (tabular amounts in thousands, except per share amounts)

SFAS No. 13 are not met. The BIS monitors under the EP program are depreciated over two years and the depreciation is charged to costs of revenue. BIS Sensor revenue is recognized either at shipment or delivery of the BIS Sensors in accordance with the agreed upon contract terms.

The Company's obligations under warranty are limited to repair or replacement of any product that the Company reasonably determines to be covered by the warranty. The Company records an estimate for its total warranty obligation in accordance with SFAS No. 5, *Accounting for Contingencies*.

In connection with the Stock Purchase Agreement and OEM Product Development Agreement with Boston Scientific Corporation ("BSC") discussed in Note 19, the Company recorded approximately \$6,300,000 of deferred revenue in August 2002. The deferred revenue is being recognized ratably over the term of the OEM product development and distribution agreement with BSC, which represents the Company's best estimate of its period of significant continuing obligation to provide BSC exclusive distribution rights to newly developed technology. The term of the OEM product development and distribution agreement continues until such time that BSC is no longer distributing the Company's products, but in no event will extend beyond December 31, 2014.

Research and Development Costs

The Company charges research and development costs to operations as incurred. Research and development costs include costs associated with new product development, product improvements and extensions, clinical studies and project consulting expenses.

Allowance for Doubtful Accounts

Estimates are used in determining the Company's allowance for doubtful accounts based on the Company's historical collections experience, historical write-offs of its receivables, current trends, credit policy and a percentage of the Company's accounts receivable by aging category. The Company also reviews the credit quality of its customer base as well as changes in its credit policies. The Company continually monitors collections and payments from its customers.

Inventory

The Company values inventory at the lower of cost or estimated market, and determines cost on a first-in, first-out basis. The Company regularly reviews inventory quantities on hand and records a provision for excess or obsolete inventory primarily based on production history and on its estimated forecast of product demand. The medical device industry in which the Company markets its products is characterized by rapid product development and technological advances that could result in obsolescence of inventory. Additionally, the Company's estimates of future product demand may prove to be inaccurate, in which case it would need to change its estimate of the provision required for excess and obsolete inventory. If revisions are deemed necessary, the Company would recognize the adjustments in the form of a charge to its costs of revenue at the time of the determination.

Warranty

Equipment that the Company sells is generally covered by a warranty period of one year. The Company accrues a warranty reserve for estimated costs to provide such warranty services. The Company's estimate of costs to service its warranty obligations is based on historical experience and an expectation of future conditions. Warranty expense for the years ended December 31, 2004, 2003 and 2002, and accrued warranty

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

cost, included in accrued liabilities in the consolidated balance sheet at December 31, 2004 and 2003, was as follows:

Balance as of December 31, 2001	\$1,090
Warranty expense	(600)
Deductions and other	<u>(122)</u>
Balance as of December 31, 2002	368
Warranty expense	(150)
Deductions and other	<u>(71)</u>
Balance as of December 31, 2003	147
Warranty expense	87
Deductions and other	<u>(97)</u>
Balance as of December 31, 2004	<u>\$ 137</u>

Shipping and Handling Costs

Shipping and handling costs are included in costs of revenue. Shipping and handling costs for the years ended December 31, 2004, 2003 and 2002 were approximately \$527,000, \$400,000 and \$392,000, respectively.

Advertising Costs

Advertising costs are expensed as incurred. These costs are included in sales and marketing expense in the consolidated statements of operations. Advertising costs for the years ended December 31, 2004, 2003 and 2002 were approximately \$231,000, \$360,000 and \$672,000, respectively.

Property and Equipment

Property and equipment is recorded at cost and depreciated using the straight-line method over the estimated useful lives of the related equipment. Equipment held under capital leases is stated at the lower of the fair market value of the equipment or the present value of the minimum lease payments at the inception of the lease, and is amortized using the straight-line method over the shorter of the lives of the related assets or the term of the leases. Repair and maintenance expenditures are charged to expense as incurred. The Company does not develop software for internal use and the costs of software acquired for internal use are accounted for in accordance with the American Institute of Certified Public Accountant's Statement of Position 98-1, *Accounting for the Costs of Computer Software Developed or Obtained for Internal Use*.

Income Taxes

The Company accounts for income taxes in accordance with SFAS No. 109, *Accounting for Income Taxes*. Under this method, deferred tax assets and liabilities are recognized for the expected future tax consequences, utilizing currently enacted tax rates, of temporary differences between the carrying amounts and the tax basis of assets and liabilities. Deferred tax assets are recognized, net of any valuation allowance, for the estimated future tax effects of deductible temporary differences and tax operating loss and credit carryforwards.

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

Concentration of Credit Risk

Financial instruments that potentially expose the Company to concentrations of credit risk primarily consist of cash, cash equivalents, investments, accounts receivable and investment in sales-type lease receivables. To minimize the financial statement risk with respect to accounts receivable and investment in sales-type lease receivables, the Company maintains reserves for potential credit losses and such losses, in the aggregate, have not exceeded management's expectations. The Company maintains cash, cash equivalents and investments with various financial institutions. The Company performs periodic evaluations of the relative credit quality of investments and Company policy is designed to limit exposure to any one institution or type of investment. The primary objective of the Company's investment strategy is the safety of the principal invested. The Company does not maintain foreign exchange contracts or other off-balance sheet financial investments.

Single or Limited Source Suppliers

The Company currently obtains certain key components of its products from single or limited sources. The Company purchases components pursuant to purchase orders rather than long-term supply agreements and generally does not maintain large volumes of inventory. The Company has experienced shortages and delays in obtaining certain components of its products in the past. The Company may experience similar shortages and delays in the future. The disruption or termination of the supply of components or a significant increase in the costs of these components from these sources could have a material adverse effect on the Company's business, financial position and results of operations and cash flows.

Net Income (Loss) Per Share

In accordance with SFAS No. 128, *Earnings Per Share*, basic net income (loss) per share amounts for the three years ended December 31, 2004, 2003 and 2002 were computed by dividing the net income (loss) available to common stockholders by the weighted average number of common shares outstanding during those periods and diluted net income (loss) per share was computed using the weighted average number of common shares outstanding and other dilutive securities as applicable, during those periods.

For the year ended December 31, 2004, the Company has included in the calculation of the Company's diluted net income per share approximately 2,144,000 shares related to common stock issuable pursuant to the exercise of stock options and warrants. The Company has excluded from the calculation of the Company's diluted net income per share approximately 22,000 share of common stock issuable pursuant to the exercise of stock options because the inclusion of these shares would have been anti-dilutive.

For the years ended December 31, 2003 and 2002, the Company has excluded from the calculation of the Company's diluted net loss per share approximately 989,000 and 590,000 shares, respectively, related to restricted common stock subject to repurchase and common stock issuable pursuant to the exercise of stock options and warrants because the inclusion of these shares would have been antidilutive as a result of the Company's net loss position.

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

Basic and diluted net income (loss) per share for the years ended December 31, 2004, 2003 and 2002 were determined as follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Basic:			
Net income (loss)	<u>\$ 303</u>	<u>\$(6,523)</u>	<u>\$(15,301)</u>
Weighted average shares outstanding	<u>20,142</u>	<u>19,413</u>	<u>18,450</u>
Basic net income (loss) per share	<u>\$ 0.02</u>	<u>\$(0.34)</u>	<u>\$(0.83)</u>
Diluted:			
Net income (loss)	<u>\$ 303</u>	<u>\$(6,523)</u>	<u>\$(15,301)</u>
Weighted average shares outstanding	20,142	19,413	18,450
Effect of dilutive stock options	<u>2,144</u>	—	—
Weighted average shares assuming dilution	<u>22,286</u>	<u>19,413</u>	<u>18,450</u>
Diluted net income (loss) per share	<u>\$ 0.01</u>	<u>\$(0.34)</u>	<u>\$(0.83)</u>

Comprehensive Income (Loss)

Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. Other than the Company's net income (loss), the only other element of comprehensive income (loss) impacting the Company is the unrealized gains (losses) on its investments for all periods presented.

Stock-Based Compensation

SFAS No. 123, *Accounting for Stock-Based Compensation*, requires the measurement of the fair value of stock options or warrants to be included in the statement of income or disclosed in the notes to financial statements. The Company accounts for stock-based compensation for employees using the intrinsic value method under APB Opinion No. 25 and has adopted the fair value disclosure-only alternative under SFAS No. 148, *Accounting for Stock-Based Compensation — Transition and Disclosure*. The Company has computed the weighted-average fair value of options granted in 2004, 2003 and 2002 using the Black-Scholes option-pricing model pursuant to SFAS No. 123. The following table shows the weighted average assumptions used in the applicable periods and the weighted average fair market value of the options granted in each period.

	<u>Year Ended December 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
Risk-free interest rate	3.23%	2.99%	4.40%
Expected dividend yield	—	—	—
Expected life of options	5 years	5 years	5 years
Expected volatility	55%	57%	75%
Weighted average fair value of options granted	\$ 7.90	\$ 3.14	\$ 6.10

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

If the Company had recognized compensation cost for these awards consistent with SFAS No. 123, the Company's net loss and pro forma net loss per common share would have been increased to the following pro forma amounts:

	Year Ended December 31,		
	2004	2003	2002
Net loss:			
Net income (loss) as reported	\$ 303	\$ (6,523)	\$(15,301)
Add: Stock-based employee compensation expense included in reported net loss	—	—	—
Deduct: Stock-based employee compensation expense determined under fair value based method for all awards	(5,945)	(7,112)	(7,744)
Pro forma net loss	<u>\$ (5,642)</u>	<u>\$ (13,635)</u>	<u>\$ (23,045)</u>
Net income (loss) per share:			
Basic:			
As reported	\$ 0.02	\$ (0.34)	\$ (0.83)
Pro forma	\$ (0.28)	\$ (0.70)	\$ (1.25)
Diluted:			
As reported	\$ 0.01	\$ (0.34)	\$ (0.83)
Pro forma	\$ (0.25)	\$ (0.70)	\$ (1.25)

Compensation expense for non-employee stock options was approximately \$66,000, \$26,000 and \$31,000 for the years ended December 31, 2004, 2003 and 2002, respectively.

The Black-Scholes option-pricing model was developed for use in estimating the fair value of traded options, which have no vesting restrictions and are fully transferable. In addition, option-pricing models require the input of highly subjective assumptions, including expected stock price volatility. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options. Also, because options vest over several years and the Company expects to grant options in future years, the above pro forma results of applying the provisions of SFAS No. 123 are not necessarily representative of the pro forma results in future years.

Use of Estimates

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

Fair Value of Financial Instruments

The estimated fair market values of the Company's financial instruments, which include cash equivalents, investments, accounts receivable, investment in sales-type leases, accounts payable and long-term debt, approximate their carrying values.

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

Reclassifications

Certain amounts in the prior years' financial statements have been reclassified to conform with the current-year presentation.

Recent Accounting Pronouncements

On December 16, 2004, the Financial Accounting Standards Board, or FASB, issued Statement No. 123 (revised 2004), *Share Based Payment*, or SFAS No. 123R, which is a revision of Statement No. 123, *Accounting for Stock-Based Compensation*, or SFAS 123. SFAS 123R supersedes APB Opinion No. 25, *Accounting for Stock Issued to Employees*, and amends SFAS No. 95, *Statement of Cash Flows*. Under SFAS No. 123R, companies must calculate and record in the income statement the cost of equity instruments, such as stock options or restricted stock, awarded to employees for services received; pro forma disclosure is not longer permitted. The cost of the equity instruments is to be measured based on fair value of the instruments on the date they are granted (with certain exceptions) and is required to be recognized over the period during which the employees are required to provide services in exchange for the equity instruments. The statement is effective in the first interim or annual reporting period beginning after June 15, 2005.

SFAS No. 123R provides two alternatives for adoption: (1) a "modified prospective" method in which compensation cost is recognized for all awards granted subsequent to the effective date of this statement as well as for the unvested portion of awards outstanding as of the effective date; or (2) a "modified retrospective" method which follows the approach in the "modified prospective" method, but also permits entities to restate prior periods to record compensation cost calculated under SFAS No. 123 for the pro forma disclosure. The Company plans to adopt SFAS No. 123R as of July 3, 2005, the beginning of our third fiscal quarter of 2005. Since the Company currently accounts for stock options granted to employees and shares issued under its employee stock purchase plan in accordance with the intrinsic value method permitted under APB Opinion No. 25, no compensation expense generally is recognized. The Company expects that the adoption of SFAS No. 123R will have a significant impact on the Company's results of operations, although it will have no impact on the Company's overall financial position. The impact of adopting SFAS No. 123R on periods after adoption cannot be accurately estimated at this time, as it will depend on the market value and the amount of share based awards granted in future periods. However, had the Company adopted SFAS No. 123R in prior periods, the impact of that standard would have approximated the impact of SFAS No. 123 as described in the disclosure of pro forma net income (loss) and earnings (loss) per share included in Note 2 to the Company's consolidated financial statements.

(3) Comprehensive Income (Loss)

The Company's total comprehensive income (loss) is as follows:

	Year Ended December 31,		
	2004	2003	2002
Net income (loss)	\$303	\$(6,523)	\$(15,301)
Other comprehensive income (loss):			
Unrealized loss on marketable securities	(74)	(25)	(13)
Comprehensive income (loss)	\$229	\$(6,548)	\$(15,314)

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

(4) Cash Equivalents, Restricted Cash and Marketable Securities

Cash and cash equivalents consist of the following:

	December 31,	
	2004	2003
Cash	\$13,009	\$11,344
Commercial paper	1,752	1,000
	<u>\$14,761</u>	<u>\$12,344</u>

At December 31, 2004, the Company maintained \$82,000 of restricted cash as part of its revolving line of credit agreement with a commercial bank (see Note 18).

Available-for-sale marketable securities at December 31, 2004 and 2003 consist of the following:

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
December 31, 2004 —				
U.S. Government debt securities	\$ 2,734	\$ 6	\$ (2)	\$ 2,738
Corporate obligations	26,094	4	(443)	25,655
Commercial paper	495	3	—	498
	<u>\$29,323</u>	<u>\$13</u>	<u>\$(445)</u>	<u>\$28,891</u>
December 31, 2003 —				
U.S. Government debt securities	\$ 508	\$—	\$ —	\$ 508
Corporate obligations	11,717	48	(52)	11,713
Commercial paper	1,497	—	—	1,497
	<u>\$13,722</u>	<u>\$48</u>	<u>\$(52)</u>	<u>\$13,718</u>

All available-for-sale marketable securities have contractual maturities of one to two years.

The aggregate fair value of investments with unrealized losses was approximately \$24,413,000 and \$9,769,000 at December 31, 2004 and 2003, respectively. All such investments have been in an unrealized loss position for less than a year.

The Company reviews investments in U.S. Government debt securities and corporate obligations for other-than-temporary impairment whenever the fair value of an investment is less than amortized cost and evidence indicates that an investment's carrying amount is not recoverable within a reasonable period of time. To determine whether an impairment is other-than-temporary, the Company considers whether it has the ability and intent to hold the investment until a market price recovery and considers whether evidence indicating the cost of the investment is recoverable outweighs evidence to the contrary.

The cost of securities sold is determined based on the specific identification method for purposes of recording realized gains and losses. Gross realized gains and losses on the sales of investments have not been material.

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

(5) Investment in Sales-Type Leases

The Company leases equipment to customers under sales-type leases. The components of the Company's net investment in sales-type leases are as follows:

	December 31,	
	2004	2003
Total minimum lease payments receivable	\$5,815	\$6,493
Less:		
Unearned interest income	842	985
Allowance for lease payments	955	1,098
Net investment in sales-type leases	4,018	4,410
Less — current portion	1,698	1,797
	\$2,320	\$2,613

Future minimum lease payments due under non-cancelable leases as of December 31, 2004 are as follows:

Year Ending December 31,	
2005	\$1,965
2006	1,400
2007	876
2008	444
2009	175
	\$4,860

(6) Inventory

Inventory consists of the following:

	December 31,	
	2004	2003
Raw materials	\$ 959	\$ 739
Work-in-progress	66	62
Finished goods	1,199	714
	\$2,224	\$1,515

For the years ended December 31, 2004, 2003 and 2002, approximately \$275,000, \$48,000 and \$30,000, respectively, of raw material components of monitors were written down to zero cost and subsequently scrapped or used for repair and service.

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

(7) Property and Equipment

Property and equipment consist of the following:

	Useful Life in Years	December 31,	
		2004	2003
Construction in progress	—	\$ 545	\$ 340
Computer equipment	3	5,731	5,262
Demonstration, evaluation and rental equipment ...	2	60	61
Machinery and equipment	3 to 5	5,021	4,555
Furniture and fixtures	3	2,012	1,934
	Shorter of the lease or useful life of the asset		
Leasehold improvements		<u>1,630</u>	<u>1,630</u>
		14,999	13,782
Accumulated depreciation and amortization		<u>(12,337)</u>	<u>(10,786)</u>
		<u>\$ 2,662</u>	<u>\$ 2,996</u>

(8) Income Taxes

The Company's effective income tax rate as of December 31, 2004 differed from the expected US federal statutory income tax rate as set forth below:

	December 31, 2004
Expected federal tax expense	\$ 103
Permanent differences	124
Previously unbenefitted net operating losses	<u>(227)</u>
Income tax expense	<u>\$ —</u>

Deferred income tax assets consist of the following:

	December 31,	
	2004	2003
Net operating loss carryforwards	\$ 33,061	\$ 29,433
Tax credit carryforwards	3,431	3,315
Deferred revenue	2,280	2,535
Other	<u>3,146</u>	<u>3,949</u>
Gross deferred tax assets	41,918	39,232
Valuation allowance	<u>(41,918)</u>	<u>(39,232)</u>
Net deferred tax asset	<u>\$ —</u>	<u>\$ —</u>

The Company accounts for income taxes under the provision of SFAS No. 109 which, requires recognition of future tax benefits (NOLs and other temporary differences), subject to a valuation allowance based on the "more-likely-than-not" standard of realizing such benefit. In determining whether it is "more-likely-than-not" that the Company will realize such benefits, SFAS No. 109 requires that all negative and positive evidence be considered in making the determination. SFAS No. 109 also indicates that "forming a

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
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conclusion that a valuation allowance is not needed is difficult when there is negative evidence such as cumulative losses in recent years;" therefore, the Company has determined that it is required by the provision of SFAS No. 109 to maintain a valuation allowance for all of the recorded net deferred tax assets. This determination is based primarily on historical losses without considering the impact of any potential upturn in the business. Accordingly, future favorable adjustments to the valuation allowance may be required if and when circumstances change. During 2004, the valuation allowance increased by \$2,686,000.

As of December 31, 2004, the Company has net operating loss carryforwards for federal and state income tax purposes of approximately \$92,195,000 and \$34,654,000, respectively, and tax credits for federal and state income tax purposes of approximately \$2,469,000 and \$1,457,000, respectively. These tax attributes began expiring in 2002 and will continue to expire through 2024 if not utilized. Additionally, the net operating loss and tax credit carryforwards are subject to review by the Internal Revenue Service. Ownership changes, as defined under Sections 382 and 383 in the Internal Revenue Code, may limit the amount of these tax attributes that can be utilized annually to offset future taxable income or tax liabilities. The amount of the annual limitation is determined based on the Company's value immediately prior to the ownership change. Subsequent ownership changes may further affect the limitation in future years.

As of December 31, 2004, the Company has deferred tax assets of approximately \$3,362,000 that pertain to net operating loss carryforwards resulting from the exercise of employee stock options. If recognized, the tax benefit of these losses will be accounted for as a credit to stockholders' equity.

(9) Stockholders' Equity

Warrants

In December 1998, the Company issued warrants to purchase approximately 193,000 shares of common stock in association with the issuance of convertible preferred stock. The warrants had an exercise price of \$12.50 per share and warrants to purchase approximately 160,000 shares of common stock expired unexercised on February 2, 2003. The Company allocated the proceeds received between the preferred stock and the warrants based on the estimated fair market values of the convertible preferred stock and the warrants.

Common Stock

At December 31, 2004, the Company has reserved approximately 7,032,000 shares of common stock for issuance under the Company's stock option plans and approximately 120,352 shares of common stock for issuance under the Company's 1999 Employee Stock Purchase Plan.

(10) Stock Option Plans

The Company's stock option plans provide for the grant, at the discretion of the Board of Directors, of options for the purchase of up to 10,560,000 shares of common stock to employees, directors and advisors. Option exercise prices are determined by the Board of Directors. Stock options and restricted common stock generally vest over two to four years and provide for the acceleration of vesting upon a change of control of the Company. At December 31, 2004, approximately 2,447,000 shares of common stock were available for future grant under the Company's stock option plans.

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

A summary of stock option activity is as follows:

	<u>Number of Shares</u>	<u>Option Exercise Prices</u>	<u>Weighted Average Option Price per Share</u>
Outstanding, December 31, 2001	3,409,778	\$.20-47.88	11.16
Granted	1,323,700	2.51-10.55	7.40
Exercised	(90,694)	.20-10.20	2.39
Canceled	<u>(543,672)</u>	2.80-28.63	10.52
Outstanding, December 31, 2002	4,099,112	.20-47.88	10.23
Granted	740,725	3.62-10.12	5.25
Exercised	(83,560)	.20-10.00	3.30
Canceled	<u>(282,109)</u>	2.51-47.88	11.81
Outstanding, December 31, 2003	4,474,168	.20-47.88	9.43
Granted	1,040,750	12.50-23.62	15.71
Exercised	(810,201)	.20-23.63	7.17
Canceled	<u>(120,284)</u>	2.51-45.83	11.42
Outstanding, December 31, 2004	<u>4,584,433</u>	\$.20-47.88	\$11.20
Exercisable, December 31, 2004	3,071,455	\$.20-47.88	\$11.15
Exercisable, December 31, 2003	2,973,255	\$.20-47.88	\$10.20
Exercisable, December 31, 2002	2,327,699	\$.20-47.88	\$10.03

During 1997 and 1998, the Company accelerated the vesting of certain employees' and directors' stock options. These employees and directors exercised options to acquire 1,495,470 shares of common stock. The option exercise price was paid in the form of cash of \$45,735 and by delivery to the Company of full recourse promissory notes of \$336,580. These promissory notes bear interest at 5.28% per annum and are payable over periods ranging up to five years. The shares of common stock were subject to a repurchase right by the Company. As of December 31, 2004, no shares remained subject to repurchase and there were no amounts outstanding on these loans.

During 2000, an employee exercised stock options to purchase 143,511 shares of common stock with a full recourse promissory note of \$234,420. The loan was payable over five years and bore interest at a rate of 8% per annum. As of December 31, 2004, there was no outstanding amount on this loan.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

A summary of outstanding and exercisable options as of December 31, 2004 is as follows:

Exercise Price	Outstanding			Exercisable	
	Number	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number	Weighted Average Exercise Price
\$ 0.20 – \$ 3.68	732,135	5.55	\$2.56	483,491	\$ 2.02
3.85 – 4.20	494,661	5.22	4.04	387,666	4.09
4.96 – 9.80	502,192	5.42	7.73	381,840	7.86
10.00 – 10.12	510,700	7.22	10.03	305,381	10.01
10.19 – 11.69	526,618	5.55	10.78	505,829	10.79
12.40 – 14.91	496,923	7.56	13.23	309,961	12.72
15.00 – 15.23	46,450	5.79	15.16	7,200	15.00
15.66 – 15.66	675,754	9.09	15.66	176,330	15.66
17.00 – 23.63	474,450	6.36	22.71	389,207	23.60
24.50 – 47.88	<u>124,550</u>	5.34	33.43	<u>124,550</u>	33.43
\$ 0.20 – \$47.88	<u>4,584,433</u>			<u>3,071,455</u>	

1991 Amended and Restated Stock Option Plan

The Company's 1991 Amended and Restated Stock Option Plan provides for the granting, at the discretion of the Board of Directors, of options for the purchase of up to 3,360,000 shares of common stock to employees, directors and advisors. Options granted under the 1991 Amended and Restated Stock Option Plan terminate ten years from the date of grant. Option exercise prices are determined by the Board of Directors.

1998 Stock Incentive Plan

The Company's 1998 Stock Incentive Plan (the "1998 Incentive Plan") was adopted by the Board of Directors on July 8, 1998. The Board of Directors has authorized the Compensation Committee to administer the 1998 Incentive Plan, including the granting of options to executive officers. At December 31, 2004, the 1998 Incentive Plan provided for the granting, at the discretion of the Compensation Committee, of options for the purchase of up to 3,000,000 shares of common stock (subject to adjustment in the event of stock splits and other similar events) to employees, directors and advisors. Options granted under the 1998 Incentive Plan terminate ten years from the date of grant. Option exercise prices are determined by the Compensation Committee, but cannot be less than 100% of fair market value for incentive stock options.

1998 Director Stock Option Plan

In February 1998, the Company adopted the 1998 Director Stock Option Plan (the "Director Plan"). Under the terms of this plan, directors of the Company who are not employees of the Company are eligible to receive nonstatutory options to purchase shares of common stock. At December 31, 2004, a total of 200,000 shares of common stock could be issued upon exercise of options under this plan. The initial options granted under the Director Plan are exercisable as to 50% of the shares pursuant to the option as of the date of grant and as to one-sixth of the shares on the first, second and third anniversaries of the date of grant, provided that the optionee continues to serve as a director and provide for the acceleration of vesting upon a change of control of the Company. Additional options, which are granted annually, will be exercisable in three equal annual installments on each of the first, second and third anniversaries of the date of grant, provided that the

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

optionee continues to serve as a director. Options granted under the Director Plan terminate on the earlier of (i) ten years from the date of grant, or (ii) sixty days after the optionee ceases to serve as a director.

1999 Employee Stock Purchase Plan

In December 1999, the Company adopted its 1999 Employee Stock Purchase Plan (the "Purchase Plan"). The Purchase Plan allows eligible employees the right to purchase shares of common stock at the lower of 85% of the closing price per share of common stock on the first or last day of an offering period. Each offering period is six months. An aggregate of 300,000 shares of common stock have been reserved for issuance pursuant to the Purchase Plan. As of December 31, 2004, 179,648 shares of the Company's common stock had been issued under the Purchase Plan.

2001 Stock Incentive Plan

The Company's 2001 Stock Incentive Plan (the "2001 Incentive Plan") was adopted by the Company's Board of Directors on March 19, 2001 and approved by the Company's stockholders on May 22, 2001. The Board of Directors has authorized the Compensation Committee to administer the 2001 Incentive Plan, including the granting of options to executive officers. At December 31, 2004, the 2001 Incentive Plan provided for the granting, at the discretion of the Compensation Committee, of options for the purchase of up to 4,000,000 shares of common stock (subject to adjustment in the event of stock splits and other similar events) to employees, directors and advisors. Options granted under the 2001 Incentive Plan terminate ten years from the date of grant. Option exercise prices are determined by the Compensation Committee, but cannot be less than 100% of fair market value for incentive stock options.

(11) Distribution and Licensing Agreements

The Company has entered into various distribution, licensing and royalty agreements relating to its products with distributors and original equipment manufacturers covering both the domestic and international markets. These agreements have original terms ranging from two to ten years. In connection with these agreements, approximately \$5,650,000 and \$6,485,000 of payments received were classified as deferred revenue as of December 31, 2004 and 2003, respectively. The deferred revenue includes prepaid license and royalty fees. The deferred revenue is recognized either at shipment or delivery in accordance with the agreed upon contract terms and as license and royalty fees are earned. License and royalty fees are related to future technological developments and will be recognized upon shipment or delivery of units incorporating the technology in accordance with the agreed upon contract terms. For the years ended December 31, 2004 and 2003, the Company had approximately \$205,000 and \$23,000, respectively, in deferred revenue related to revenue arrangements, which had been deferred until the revenue recognition criteria in SAB No. 104 and other authoritative accounting literature have been met.

(12) 401(k) Savings Plan

The Company has a 401(k) savings plan in which substantially all domestic employees can participate. Employer contributions are at the discretion of the Board of Directors and vest ratably over five years. The Company made no contributions to the plan during the years ended December 31, 2004, 2003 and 2002.

(13) Commitments and Contingencies

Leases

The Company leases approximately 61,000 square feet of research and development, sales and marketing, production and general and administrative space in Newton, Massachusetts under an operating lease that

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(tabular amounts in thousands, except per share amounts)

expires in December 2006. Effective February 1, 2004, the lease on the Company's office space in Leiden, The Netherlands expired. A new operating lease for the Company's international organization was entered into for approximately 2,765 square feet of office space in De Meern, The Netherlands. This lease expires in October 2008. Rent expense was approximately \$998,000, \$936,000 and \$966,000 in 2004, 2003 and 2002, respectively. Future gross minimum lease commitments for all non-cancelable operating leases as of December 31, 2004 are as follows:

<u>Year Ending December 31,</u>	
2005	\$1,258
2006	1,238
2007	222
2008	<u>94</u>
Total minimum lease payments.....	<u>\$2,812</u>

(14) Other Related Party Transactions

Through May 2002, the Company loaned, on a full recourse basis, an aggregate of \$1,491,000, to certain officers, employees and a consultant of the Company. All loans are evidenced by promissory notes bearing interest with rates ranging from 5.00% to 8.00% per annum. The loans are payable over periods ranging from one to five years and in each case are secured by certain assets of the borrower, including shares of the Company's common stock owned by the borrower. At December 31, 2004 and 2003, the aggregate outstanding balance on these loans was approximately \$47,000 and \$781,000, respectively. The long-term portion of the loans is included in long-term notes receivable from related parties, and the short-term portion of approximately \$22,000 and \$128,000 at December 31, 2004 and 2003, respectively, is included in other current assets in the accompanying consolidated balance sheets.

(15) Accrued Liabilities

Accrued liabilities consist of the following:

	<u>December 31,</u>	
	<u>2004</u>	<u>2003</u>
Payroll and payroll-related	\$5,614	\$5,492
Professional services.....	281	223
Warranty	137	147
Accrued research and development expenses	133	105
Accrued sales and marketing expenses	165	486
Accrued general and administrative expenses	164	223
Deferred rent expense	128	177
Taxes payable	527	615
Unvouchered invoices	<u>683</u>	<u>403</u>
Total accrued liabilities	<u>\$7,832</u>	<u>\$7,871</u>

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

(16) Segment Information and Enterprise Reporting

The Company operates in one reportable segment as it markets and sells one family of anesthesia monitoring systems. The Company does not disaggregate financial information by product or geographically, other than export sales by region and sales by product, for management purposes. Substantially all of the Company's assets are located within the United States. All of the Company's products are manufactured in the United States.

Revenue by geographic destination and as a percentage of total revenue is as follows:

	Year Ended December 31,		
	2004	2003	2002
Geographic Area by Destination			
Domestic	\$43,638	\$35,968	\$33,089
International	11,926	8,123	6,687
Total	\$55,564	\$44,091	\$39,776

	Year Ended December 31,		
	2004	2003	2002
Geographic Area by Destination			
Domestic	79%	82%	83%
International	21	18	17
Total	100%	100%	100%

The Company did not have sales in any individual country, other than the United States, that accounted for more than 10% of the Company's total revenue for the years ended December 31, 2004, 2003 and 2002.

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
 (tabular amounts in thousands, except per share amounts)

(17) Valuation and Qualifying Accounts

The following tables set forth activity in the Company's valuation and qualifying accounts:

	Balance at Beginning of Period	Additions		Deductions	Balance at End of Period
		Charges (Credits) to Expenses and Costs of Revenue	Charges (Credits) to Revenue		
Allowance for Doubtful Accounts					
Year Ended —					
December 31, 2002	\$ 522,000	\$ (100,000)	\$ —	\$ 14,000	\$ 408,000
December 31, 2003	408,000	(237,000)	—	21,000	150,000
December 31, 2004	150,000	(39,000)		70,000	41,000
Reserve for Excess or Obsolete Inventory					
Year Ended —					
December 31, 2002	\$ 296,000	\$ (80,000)	\$ —	\$ 30,000	\$ 186,000
December 31, 2003	186,000	70,000	—	48,000	208,000
December 31, 2004	208,000	279,000	—	275,000	212,000
Allowance for Lease Payments					
Year Ended —					
December 31, 2002	\$ 957,000	\$ —	\$ 209,000	\$ —	\$ 1,166,000
December 31, 2003	1,166,000	—	186,000	254,000	1,098,000
December 31, 2004	1,098,000	—	(122,000)	(21,000)	955,000

(18) Loan Agreements

In May 2001, the Company entered into an agreement with a commercial bank for a revolving line of credit. The Company is entitled to borrow up to \$5,000,000 under the revolving line of credit, which expires in May 2005 and, subject to annual review by the commercial bank, may be extended at the discretion of the commercial bank. Interest on any borrowings under the revolving line of credit is, at the election of the Company, either the prime rate or at LIBOR plus 2.25%. Up to \$1,500,000 of the \$5,000,000 revolving line of credit is available for standby letters of credit. At December 31, 2004, the Company had outstanding standby letters of credit with the commercial bank of approximately \$80,000. At December 31, 2004, there was no outstanding balance under this revolving line of credit.

The revolving line of credit agreement contains restrictive covenants that require the Company to maintain liquidity and net worth ratios and is secured by certain investments of the Company, which are shown as restricted cash in the accompanying consolidated balance sheets. In connection with the extension of the revolving line of credit in May 2004, the Company is required to maintain restricted cash in an amount equal to 102% of the outstanding amounts under the revolving line of credit agreement. Prior to the amendment in May 2004, the Company was required to maintain restricted cash in an amount equal to 102% of the \$5,000,000 commitment, or \$5,100,000. At December 31, 2004, the Company was in compliance with all covenants contained in the revolving line of credit agreement. At December 31, 2004, the interest rate on the revolving line of credit was 5.25%.

In August 2002, the Company entered into an agreement for a \$5,000,000 revolving line of credit with BSC in connection with a strategic alliance (see Note 19).

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(tabular amounts in thousands, except per share amounts)

In July 1999, the Company entered into an agreement under which it can sell a portion of its existing and future investment in sales-type leases to a third-party finance company. Through December 31, 2004, the Company sold approximately \$5.1 million of its investment in sales-type leases. In accordance with SFAS No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities — A Replacement of FASB Statement No. 125*, the proceeds from these sales have been classified as debt in the accompanying consolidated balance sheets. This debt bears interest at rates ranging from 10.25% to 12.50%. Payments on the outstanding principal under this debt match the timing of the payments due on the underlying investment in sales-type leases.

Future principal payments under the Company's sales-type lease debt agreements are as follows:

<u>Year Ending December 31,</u>	
2005	\$311
2006	126
2007	56
2008	<u>4</u>
Total principal payments	<u>\$497</u>

(19) Strategic Alliance with Boston Scientific Corporation

On August 7, 2002, the Company formed a strategic alliance with BSC. In connection with this strategic alliance, the Company sold 1,428,572 shares of the Company's common stock at a purchase price per share of \$7.00 to BSC pursuant to a stock purchase agreement. Gross cash proceeds from this sale of common stock were \$10,000,004. In addition, the Company granted BSC an option under an OEM product development and distribution agreement to distribute newly developed technology for monitoring patients under sedation in a range of less-invasive medical specialties. The Company allocated the fair market value between the common stock and the option to be the exclusive distributor. The excess of \$4.41 per share paid by BSC over the closing price of the Company's common stock on August 7, 2002, or approximately \$6,300,000 in total, was attributed to the value of the rights provided to BSC under the OEM product development and distribution agreement.

Approximately \$4,917,000 of the aggregate purchase price is recorded as deferred revenue in the accompanying consolidated balance sheet at December 31, 2004, which represents the unamortized portion of the purchase price in excess of the closing price of the Company's common stock on August 7, 2002. The deferred revenue is being recognized ratably over the term of the OEM product development and distribution agreement, which represents the Company's best estimate of its period of significant continuing obligation to provide BSC exclusive distribution rights to newly developed technology. The term of the agreement continues until such time that BSC is no longer distributing the Company's products, but in no event will extend beyond December 31, 2014 pursuant to an amendment to the OEM product development agreement with Boston Scientific Corporation entered into in January 2005. On January 31, 2005, the Company amended its OEM product development agreement with Boston Scientific Corporation to provide a two year extension to the period during which Boston Scientific Corporation may exercise an option to distribute sedation management technology for interventional and specialty medical procedure suites. The amendment extends until December 31, 2006, Boston Scientific Corporation's right to exercise its option and also extends until the end of 2014 the term of Boston Scientific Corporation's distribution rights. This amendment will reduce the revenue that the Company records on a quarterly basis by approximately \$31,000. Approximately \$615,000 was recognized as revenue for the years ended December 31, 2004 and 2003.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

As part of the strategic alliance with BSC, the Company also entered into an agreement pursuant to which BSC has agreed to provide the Company a \$5,000,000 revolving line of credit, which expires in August 2007 and may be extended at the discretion of BSC. Interest on any borrowings under this revolving line of credit is at a rate equal to the LIBOR rate at which BSC, under its own revolving credit facility, is entitled to borrow funds, plus any additional amounts payable thereon by BSC under such revolving credit facility, plus eighty basis points. The Company's revolving line of credit with BSC is secured by the Company's inventory and certain of the Company's accounts receivable and contains certain restrictive covenants covering the collateral. At December 31, 2004, there was no outstanding balance under this revolving line of credit, and the Company was in compliance with all covenants contained in the revolving line of credit agreement.

On April 7, 2004, the Company entered into an agreement with BSC to issue and sell 500,000 shares of the Company's common stock to BSC pursuant to a stock purchase agreement. The Company completed the sale on June 8, 2004. The purchase price per share was \$16.21 and the aggregate gross proceeds from the transaction were \$8,105,000. In connection with this sale of common stock, the Company has granted BSC the right to require the Company to register these shares for resale under the Securities Act of 1933.

(20) Shareholder Rights Plan

On November 29, 2004, the Company adopted a shareholder rights plan. In connection with the adoption of this plan, the Company's Board of Directors declared a dividend of one right for each outstanding share of the Company's Common Stock, \$0.01 par value per share, to stockholders of record at the close of business on December 10, 2004. Pursuant to the Rights Agreement, each Right entitles the registered holder to purchase from the Company one one-thousandth of a share of the Company's Series A Junior Participating Preferred Stock, \$0.01 par value per share, at a purchase price of \$150.00 per share in cash. The Rights are not exercisable until the Distribution Date as defined in the Rights Agreement filed with the Securities and Exchange Commission on December 1, 2004 and will expire upon the close of business on November 29, 2014 unless earlier redeemed or exchanged as defined in the Rights Agreement.

ASPECT MEDICAL SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(tabular amounts in thousands, except per share amounts)

(21) Summarized Quarterly Financial Data (Unaudited)

The tables that follow summarize unaudited quarterly financial data for the years ended December 31, 2004 and December 31, 2003:

	For the Quarter Ended			
	April 3, 2004	July 3, 2004	October 2, 2004	December 31, 2004
Revenue	\$12,797	\$13,426	\$13,625	\$15,716
Gross profit margin	9,932	10,249	10,380	12,011
Operating expenses	10,908	10,818	10,118	11,349
Net income (loss)	\$ (796)	\$ (376)	\$ 520	\$ 955
Net income (loss) per share				
Basic	\$ (0.04)	\$ (0.02)	\$ 0.03	\$ 0.05
Diluted	\$ (0.04)	\$ (0.02)	\$ 0.02	\$ 0.04

	For the Quarter Ended			
	March 29, 2003	June 28, 2003	September 27, 2003	December 31, 2003
Revenue	\$10,127	\$10,709	\$11,189	\$12,066
Gross profit margin	7,578	7,992	8,428	9,194
Operating expenses	10,296	9,972	9,982	10,191
Net loss	\$(2,524)	\$(1,795)	\$(1,387)	\$ (817)
Basic and diluted net loss per share	\$ (0.13)	\$ (0.09)	\$ (0.07)	\$ (0.04)

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Exhibit</u>
3(i).1	Restated Certificate of Incorporation is incorporated herein by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
3(ii).1	Amended and Restated By-Laws are incorporated herein by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended March 31, 2001 (File No. 0-24663).
3.2	Certificate of Designations of Series A Junior Participating Preferred Stock is incorporated herein by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K as filed with the Commission on November 29, 2004 (File No. 333-86295).
4.1	Specimen common stock certificate is incorporated herein by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
4.2	See Exhibits 3(i).1 and 3(ii).1 for provisions of the Registrant's certificate of incorporation and by-laws defining the rights of holders of common stock.
4.3	Rights Agreement, dated as of November 29, 2004, between Aspect Medical Systems, Inc. and EquiServe Trust Company, N.A., which includes as Exhibit A the form of Certificate of Designations of Series A Junior Participating preferred Stock, as Exhibit B the form of Rights Certificate and as Exhibit C the Summary of Rights to Purchase Preferred Stock is incorporated herein by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K as filed with the Commission on November 29, 2004 (File No. 333-86295).
10.1	1998 Director Stock Option Plan, as amended, is incorporated herein by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
10.2†	International Distribution Agreement, dated as of January 21, 1998, by and between the Registrant and Nihon Kohden Corporation is incorporated herein by reference to Exhibit 10.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
10.3†	International License Agreement, dated as of January 21, 1998, by and between the Registrant and Nihon Kohden Corporation is incorporated herein by reference to Exhibit 10.3 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
10.4	License Agreement, dated as of October 31, 1995, by and between the Registrant and Siemens Medical Systems, Inc. is incorporated herein by reference to Exhibit 10.5 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
10.5†	Product Agreement, dated May 5, 1999, by and between the Registrant and Drager Medizintechnik GmbH is incorporated herein by reference to Exhibit 10.6 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
10.6†	OEM Development and Purchase Agreement, dated August 6, 1999, by and between the Registrant and Philips Medizinsysteme Boeblingen GmbH (formerly Agilent Technologies, Inc.) is incorporated herein by reference to Exhibit 10.7 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
10.7†	Letter Agreement, dated August 27, 1999, by and between the Registrant and Philips Medizinsysteme Boeblingen GmbH (formerly Agilent Technologies, Inc.) is incorporated herein by reference to Exhibit 10.8 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
10.8†	Distribution and License Agreement, dated as of April 1, 1996, between SpaceLabs Medical, Inc. and the Registrant is incorporated herein by reference to Exhibit 10.9 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
10.9	Form of Promissory Note made in favor of the Registrant by certain directors and executive officers, together with Form of Pledge Agreement, by and between the Registrant and certain directors and executive officers, together with a schedule of material terms are incorporated herein by reference to Exhibit 10.16 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).

Exhibit
No.

Exhibit

- 10.10 Promissory Note, dated April 10, 1998, made in favor of the Registrant by Jeffrey Barrett, together with Pledge Agreement, dated as of April 10, 1998, by and between the Registrant and Jeffrey Barrett are incorporated herein by reference to Exhibit 10.18 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
- 10.11 Fourth Amended and Restated Registration Rights Agreement, dated December 17, 1998, by and among the Registrant and the several purchasers named on the signature pages thereto is incorporated herein by reference to Exhibit 10.21 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
- 10.12† Supplier Agreement, dated August 13, 1999, between Novation, LLC and the Registrant is incorporated herein by reference to Exhibit 10.24 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
- 10.13† OEM Development and Purchase Agreement, dated December 22, 1999, by and between the Registrant and GE Marquette Medical Systems, Inc. is incorporated herein by reference to Exhibit 10.26 to the Registrant's Registration Statement on Form S-1 (File No. 333-86295).
- 10.14† Master Distribution Agreement, dated September 1, 2000, by and between the Registrant and Datex-Ohmeda Division of Instrumentarium Corporation is incorporated herein by reference to Exhibit 10.21 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 0-24663).
- 10.15 Sublease Agreement, dated as of October 15, 1999, by and between Newton Technology Park LLC and the Registrant is incorporated herein by reference to Exhibit 10.24 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 0-24663 Iomega).
- 10.16 Revolving Credit Facility, dated as of May 16, 2001, by and between the Registrant and Fleet National Bank, together with Promissory Note, dated May 16, 2001, by and between the Registrant and Fleet National Bank and Pledge Agreement, dated as of May 16, 2001, by and between the Registrant and Fleet National Bank is incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended June 30, 2001 (File No. 0-24663).
- 10.17 First Amendment, dated December 21, 2001, to Loan Agreement, dated as of May 16, 2001, by and between the Registrant and Fleet National Bank is incorporated herein by reference to Exhibit 10.26 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2001 (File No. 0-24663).
- 10.18† Addendum No. 1, effective January 1, 2002, to OEM Development and Purchase Agreement, dated December 22, 1999, by and between the Registrant and GE Medical Systems, Inc. is incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended March 30, 2002 (File No. 0-24663).
- 10.19 Advisory Board Agreement, dated as of January 23, 2002, by and between Stephen E. Coit and the Registrant is incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the period ended March 30, 2002 (File No. 0-24663).
- 10.20 Stock Purchase Agreement, dated as of August 7, 2002, by and between the Registrant and Boston Scientific Corporation is incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated August 7, 2002 (File No. 0-24663).
- 10.21 Registration Rights Agreement, dated as of August 7, 2002, by and between the Registrant and Boston Scientific Corporation is incorporated herein by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K dated August 7, 2002 (File No. 0-24663).
- 10.22 Loan Agreement, dated August 7, 2002, by and between the Registrant and Boston Scientific Corporation, together with Security Agreement, dated August 7, 2002, by and between the Registrant and Boston Scientific Corporation and Promissory Note dated as of August 7, 2002, made by the Registrant in favor of Boston Scientific Corporation are incorporated herein by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K dated August 7, 2002 (File No. 0-24663).

Exhibit
No.

Exhibit

- 10.23† OEM Product Development Agreement, dated as of August 7, 2002, by and between the Registrant and Boston Scientific Corporation is incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended September 28, 2002 (File No. 0-24663).
- 10.24 Third Amendment, dated March 21, 2003, to Loan Agreement, dated as of May 16, 2001, by and between the Registrant and Fleet National Bank is incorporated herein by reference to Exhibit 10.33 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 0-24663).
- 10.25† OEM Development and Purchase Agreement, dated February 13, 2002, by and between the Registrant and Dixtal Biomedica Ind E Com Ltda. is incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended March 29, 2003 (File No. 0-24663).
- 10.26 Special Bonus Program for Nassib G. Chamoun dated April 24, 2003 is incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the period ended March 29, 2003 (File No. 0-24663).
- 10.27† OEM Development and Purchase Agreement, dated July 24, 2003, by and between the Registrant and Datascope Corp. is incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended September 27, 2003 (File No. 0-24663).
- 10.28† Addendum 1, effective January 1, 2003, to the OEM Purchase Agreement, dated September 1, 2000, by and between the Registrant and Datex-Ohmeda Division of Instrumentarium Corporation is incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the period ended September 27, 2003 (File No. 0-24663).
- 10.29† Addendum 1, Effective January 1, 2003, to the OEM Development and Purchase Agreement, dated August 6, 1999, by and between the Registrant and Philips Medizinsysteme Boeblingen GmbH (formerly Agilent Technologies, Inc.) is incorporated herein by reference to Exhibit 10.35 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 0-24663).
- 10.30† Addendum 3, effective March 13, 2003, to the OEM Development and Purchase Agreement, dated December 22, 1999, by and between the Registrant and GE Marquette Medical Systems, Inc is incorporated herein by reference to Exhibit 10.36 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 0-24663).
- 10.31† BISx Development, Purchase and License Agreement dated January 28, 2004, by and between the Registrant and Draeger Medical Systems, Inc. is incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended April 3, 2004 (File No. 0-24663).
- 10.32† Addendum 2, effective January 1, 2004, to the OEM Development and Purchase Agreement, dated August 6, 1999, by and between the Registrant and Philips Medizinsysteme Boeblingen GmbH (formerly Agilent Technologies, Inc.) is incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the period ended April 3, 2004 (File No. 0-24663).
- 10.33 Stock Purchase Agreement, dated as of April 7, 2004, by and between the Registrant and Boston Scientific Corporation is incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated April 7, 2004 (File No. 0-24663) is incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the period ended April 3, 2004 (File No. 0-24663).
- 10.34 Fifth Amendment, dated May 14, 2004, to Loan Agreement, dated as of May 16, 2001, by and between the Registrant and Fleet National Bank, together with Deposit Pledge Agreement, dated May 14, 2004, by and between the Registrant and Fleet National Bank is incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended July 3, 2004 (File No. 0-24663).

Exhibit
No.

Exhibit

- 10.35† Exclusive License Agreement, dated July 1, 2004, by and between the Registrant and The Regents of the University of California is incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the period ended July 3, 2004 (File No. 0-24663).
- 10.36 Sixth Amendment, dated October 8, 2004, to Loan Agreement, dated May 16, 2001, by and between the Registrant and Fleet National Bank is incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended October 2, 2004 (File No. 0-24663).
- 10.37 2001 Stock Incentive Plan, is incorporated herein by reference to the Registrant's Definitive Proxy Statement filed on April 18, 2001 (File No. 0-24663).
- 10.38 Executive Officer 2005 Bonus Plan is incorporated herein by reference to the Registrants Current Report on Form 8-K dated February 17, 2005 (File No. 0-24663).
- 10.39 Form of Stock Option Agreement Granted Under 2001 Stock Incentive Plan.
- 10.40 Cash Compensation for Non-Management Directors of Aspect Medical Systems, Inc.
- 10.41 Base Salaries of Named Executive Officers of Aspect Medical Systems, Inc.
- 21.1 Subsidiaries of the Registrant.
- 23.1 Consent of Ernst & Young LLP.
- 31.1 Certification by Chief Executive Officer Pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
- 31.2 Certification by Chief Financial Officer Pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
- 32.1 Certification by Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 32.2 Certification by Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

† Confidential treatment has been requested as to certain portions of this Exhibit. Such portions have been omitted and filed separately with the Securities and Exchange Commission.

ASPECT MEDICAL SYSTEMS, INC.

141 Needham Street
Newton, Massachusetts 02464

NOTICE OF 2005 ANNUAL MEETING OF STOCKHOLDERS To Be Held On May 25, 2005

To our stockholders:

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of Aspect Medical Systems, Inc. will be held on Wednesday, May 25, 2005 at 9:00 a.m., local time, at our corporate offices, 141 Needham Street, Newton, Massachusetts 02464. At the meeting, stockholders will consider and vote on the following matters:

1. The election of three (3) members to our board of directors to serve as Class II directors, each for a term of three years.
2. The approval of our Amended and Restated 1998 Director Equity Incentive Plan.
3. The approval of an amendment to our 2001 Stock Incentive Plan.
4. The ratification of the selection by the Audit Committee of our board of directors of Ernst & Young LLP as our registered public accounting firm for the fiscal year ending December 31, 2005.

The stockholders will also act on any other business that may properly come before the annual meeting or any adjournment thereof.

Stockholders of record at the close of business on April 12, 2005 are entitled to notice of, and to vote at, the annual meeting or any adjournment thereof. Your vote is important regardless of the number of shares you own. Our stock transfer books will remain open for the purchase and sale of our common stock.

We hope that all stockholders will be able to attend the annual meeting in person. However, in order to ensure that a quorum is present at the meeting, please date, sign and promptly return the enclosed proxy card whether or not you expect to attend the annual meeting. A postage-prepaid envelope, addressed to EquiServe Trust Company, N.A., our transfer agent and registrar, has been enclosed for your convenience. Sending in your proxy will not prevent you from voting your stock at the annual meeting if you desire to do so, as your proxy is revocable at your option.

All stockholders are cordially invited to attend the meeting.

By Order of the Board of Directors,

Michael Falvey
Secretary

Newton, Massachusetts
April 26, 2005

WHETHER OR NOT YOU EXPECT TO ATTEND THE ANNUAL MEETING, PLEASE COMPLETE, DATE AND SIGN THE ENCLOSED PROXY CARD AND PROMPTLY MAIL IT IN THE ENCLOSED ENVELOPE IN ORDER TO ASSURE REPRESENTATION OF YOUR SHARES AT THE ANNUAL MEETING. NO POSTAGE NEED BE AFFIXED IF THE PROXY CARD IS MAILED WITHIN THE UNITED STATES.

ASPECT MEDICAL SYSTEMS, INC.

141 Needham Street
Newton, Massachusetts 02464

PROXY STATEMENT

for the 2005 Annual Meeting of Stockholders
To Be Held On May 25, 2005

This Proxy Statement and the enclosed proxy card are being furnished in connection with the solicitation of proxies by the board of directors of Aspect Medical Systems, Inc. for use at the Annual Meeting of Stockholders to be held on Wednesday, May 25, 2005 at 9:00 a.m., local time, at the executive offices of Aspect Medical Systems, Inc., 141 Needham Street, Newton, Massachusetts 02464, and at any adjournment thereof.

All proxies will be voted in accordance with the instructions contained in those proxies. If no choice is specified, the proxies will be voted in favor of the matters set forth in the accompanying Notice of Annual Meeting of Stockholders. Any proxy may be revoked by a stockholder at any time before it is exercised by signing another proxy with a later date, delivery of written revocation to our Secretary or by appearing at the meeting and voting in person.

Our Annual Report to Stockholders for the fiscal year ended December 31, 2004 is being mailed to stockholders with the mailing of the Notice of Annual Meeting of Stockholders and this Proxy Statement on or about April 26, 2005.

A copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2004 as filed with the Securities and Exchange Commission, except for exhibits, will be furnished without charge to any stockholder upon written or oral request to our Investor Relations Department, Aspect Medical Systems, Inc., 141 Needham Street, Newton, Massachusetts 02464, telephone: (617) 559-7000.

Voting Securities and Votes Required

Stockholders of record at the close of business on April 12, 2005 will be entitled to notice of, and to vote at, the annual meeting. On that date, 21,164,350 shares of our common stock were issued and outstanding. Each share of common stock entitles the holder to one vote with respect to all matters submitted to stockholders at the meeting. We have no other securities entitled to vote at the meeting.

The representation in person or by proxy of at least a majority of the shares of common stock issued, outstanding and entitled to vote at the annual meeting is necessary to establish a quorum for the transaction of business. If a quorum is not present, the meeting will be adjourned until a quorum is obtained.

Directors are elected by a plurality of votes cast by stockholders entitled to vote at the annual meeting. To be approved, each of the Amended and Restated 1998 Director Equity Incentive Plan, the amendment to our 2001 Stock Incentive Plan and the ratification of Ernst & Young LLP as our registered public accounting firm requires the affirmative vote of the majority of shares present in person or represented by proxy at the annual meeting. The votes will be counted, tabulated and certified by a representative of EquiServe Trust Company, N.A., who will serve as the inspector of elections at the annual meeting.

Shares which abstain from voting as to a particular matter, and shares held in "street name" by banks, brokerage firms or nominees who indicate on their proxy cards that they do not have discretionary authority to vote such shares as to a particular matter, which we refer to as "broker non-votes," will not be considered as present and entitled to vote with respect to a particular matter and will not be considered a vote cast on such matter. Accordingly, neither abstentions nor broker non-votes will have any effect upon the outcome of voting with respect to any matters voted on at the annual meeting, but will be counted for the purpose of determining whether a quorum exists.

Stockholders may vote in person or by proxy. Execution of a proxy will not in any way affect a stockholder's right to attend the meeting and vote in person. Any stockholder voting by proxy has the right to revoke the proxy at any time before the polls close at the annual meeting by giving our Secretary a duly executed proxy card bearing a later date than the proxy being revoked at any time before that proxy is voted, by giving our Secretary written notice that you want to revoke your proxy or by appearing at the meeting and voting in person. The shares represented by all properly executed proxies received in time for the meeting will be voted as specified in those proxies. If the shares you own are held in your name and you do not specify in the proxy card how your shares are to be voted, they will be voted in favor of:

- the election as Class II directors of those persons named in this Proxy Statement,
- the Amended and Restated 1998 Director Equity Incentive Plan,
- the amendment to our 2001 Stock Incentive Plan,
- the ratification of Ernst & Young LLP as our registered public accounting firm, and
- any other items that may properly come before the meeting.

If the shares you own are held in "street name," the bank, brokerage firm or nominee, as the record holder of your shares, is required to vote your shares in accordance with your instructions. In order to vote your shares held in "street name," you will need to follow the directions your bank, brokerage firm or nominee provides you. If you desire to vote your shares held in "street name" at the meeting by proxy, you will need to obtain a proxy card from the holder of record.

Householding of Annual Meeting Materials

Some banks, brokers and other nominee record holders may be participating in the practice of "householding" Proxy Statements and Annual Reports. This means that only one copy of our Proxy Statement and Annual Report to Stockholders may have been sent to multiple stockholders in your household. We will promptly deliver a separate copy of either document to you upon written or oral request to our Investor Relations Department, Aspect Medical Systems, Inc., 141 Needham Street, Newton, Massachusetts 02464, telephone: (617) 559-7000. If you want to receive separate copies of the Proxy Statement or Annual Report to Stockholders in the future, or if you are receiving multiple copies and would like to receive only one copy per household, you should contact your bank, broker or other nominee record holder, or you may contact us at the above address and phone number.

STOCK OWNERSHIP INFORMATION

The following table sets forth information regarding beneficial ownership of our common stock as of January 31, 2005 by:

- each person or entity known to us to beneficially own more than 5% of the outstanding shares of our common stock,
- each of our directors,
- our chief executive officer and our four other most highly compensated executive officers who were serving as executive officers on December 31, 2004, and
- all of our directors and executive officers as a group.

The number of shares of common stock beneficially owned by each person or entity is determined in accordance with the applicable rules of the Securities and Exchange Commission, or SEC, and includes voting or investment power with respect to shares of our common stock. The information contained in the following table is not necessarily indicative of beneficial ownership for any other purpose and the inclusion of any shares in the table does not constitute an admission of beneficial ownership of those shares. Shares of our common stock issuable under stock options exercisable on or before April 1, 2005 are deemed beneficially owned and such shares are used in computing the percentage ownership of the person holding the options, but are not deemed outstanding for computing the percentage ownership of any other person. Unless otherwise indicated, to our knowledge, all persons named in the table have sole voting and investment power with respect to their shares of common stock, except to the extent authority is shared by spouses under community property laws. Unless otherwise indicated, the address of all directors and executive officers is c/o Aspect Medical Systems, Inc., 141 Needham Street, Newton, Massachusetts 02464.

<u>Name and Address of Beneficial Owner</u>	<u>Number of Shares Beneficially Owned (1)</u>	<u>Percentage of Common Stock Beneficially Owned</u>
5% Stockholders		
Boston Scientific Corporation (2)	4,985,730	23.9
One Boston Scientific Place Natick, Massachusetts 01760		
Massachusetts Financial Services Company (3)	2,056,250	9.8
500 Boylston Street Boston, MA 02464		
FMR Corp. (4)	1,957,100	9.4
82 Devonshire Street Boston, MA 02109		
Directors and Named Executive Officers		
J. Neal Armstrong	382,317	1.8
Boudewijn L.P.M. Bollen	128,451	*
Nassib G. Chamoun (5)	702,189	3.3
J. Breckenridge Eagle (6)	340,541	1.6
David W. Feigal, Jr., M.D.	10,000	*
William H. Floyd	149,066	*
Edwin M. Kania, Jr. (7)	685,515	3.3
Scott D. Kelley, M.D.	188,056	*
James J. Mahoney, Jr.	23,133	*
Richard J. Meelia	14,999	*
Donald R. Stanski, M.D.	32,999	*
All directors and executive officers as a group (16 persons)	3,469,138	15.2

* Less than 1% of our outstanding common stock.

- (1) Includes the following number of shares of our common stock issuable upon the exercise of outstanding stock options which may be exercised on or before April 1, 2005: Mr. Armstrong: 231,512; Mr. Bollen: 128,451; Mr. Chamoun: 340,639; Mr. Eagle: 155,595; Dr. Feigal: 10,000; Mr. Floyd: 149,066; Mr. Kania: 29,999; Dr. Kelley: 174,872; Mr. Mahoney: 8,333; Mr. Meelia: 14,999; Dr. Stanski: 32,999; and all directors and executive officers as a group: 1,879,918.
- (2) This information is taken from a Schedule 13G/A filed with the SEC on February 14, 2005.
- (3) This information is taken from a Schedule 13G filed with the SEC on February 10, 2005.
- (4) This information is taken from a Schedule 13G filed with the SEC on February 14, 2005 by FMR Corp. jointly with its affiliates, Edward C. Johnson III and Abigail Johnson. Of the 1,957,100 shares of common stock deemed beneficially owned, FMR Corp. reports sole voting power as to 169,240 shares. Various persons have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the 1,957,100 shares of common stock. No one person's interest in the 1,957,100 shares of common stock is more than 5% of the total outstanding common stock.
- (5) Includes 120,000 shares of common stock held by The Nassib G. Chamoun 1998 Irrevocable Trust, a trust for the benefit of Mr. Chamoun's minor children. Mr. Chamoun disclaims beneficial ownership of all shares held in this trust.
- (6) Includes 25,000 shares of common stock held by Jeanne Warren Eagle as Trustee for the Trust for John Warren Eagle, of which Mr. Eagle disclaims beneficial ownership.
- (7) Includes 622,097 shares beneficially held by One Liberty Fund III, L.P. Mr. Kania, a director of Aspect, is a general partner of One Liberty Partners III, L.P., the sole general partner of One Liberty Fund III, L.P. Also includes 1,605 shares held by Mr. Kania's minor children. Mr. Kania disclaims beneficial ownership of the shares held by One Liberty Fund III, L.P., except to the extent of his pecuniary interest in those shares.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 requires our directors, executive officers and the holders of more than 10% of our common stock to file with the SEC initial reports of ownership of our common stock and other equity securities on a Form 3 and reports of changes in such ownership on a Form 4 or Form 5. Officers, directors and 10% stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file. Based solely on our review of copies of reports filed by the reporting persons furnished to us, or written representations from reporting persons, we believe that during the fiscal year ended December 31, 2004, the reporting persons complied with all Section 16(a) filing requirements, other than the following late filings: each of Nassib Chamoun, J. Breckenridge Eagle, John Coolidge, Marc Davidson, Philip Devlin, Michael Falvey, William Floyd, Scott Kelley and Paul Manberg failed to timely file a Form 4 on October 19, 2004 to report the receipt of one share of common stock pursuant to an award made to all employees; David Feigal failed to timely file a Form 3 upon his initial election to the board of directors on December 16, 2004 and a Form 4 to report his receipt of a stock option grant to purchase 20,000 shares of common stock on December 16, 2004; Eliot Daley failed to timely file a Form 4 to report the sale of 25,081 shares of common stock on September 16, 2004; Edwin Kania failed to timely file a Form 4 to report the sale of 10,000 shares of common stock on December 17, 2004 by One Liberty Fund III, L.P., Mr. Kania is the general partner of One Liberty Partners III, L.P., which serves as the general partner of One Liberty Fund III, L.P.

PROPOSAL ONE — ELECTION OF DIRECTORS

We have a classified board of directors consisting of eight members: three Class I Directors, three Class II Directors and two Class III Directors. At each Annual Meeting of Stockholders, one class of directors is elected for a full term of three years to succeed those directors whose terms are expiring. Based on the recommendation of the Corporate Governance and Nominating Committee, the board of directors has nominated Boudewijn L.P.M. Bollen, J. Breckenridge Eagle and Edwin M. Kania to serve as Class II directors. The persons named in the enclosed proxy card will vote to elect, as Class II Directors, Boudewijn L.P.M. Bollen, J. Breckenridge Eagle and Edwin M. Kania, the three director nominees, unless the proxy card is marked otherwise. Each Class II Director will be elected to hold office until the 2008 Annual Meeting of Stockholders and until his successor is elected and qualified.

If a stockholder returns a proxy card without contrary instructions, the persons named as proxies will vote to elect as directors the nominees identified below, each of whom is currently a member of our board of directors. The nominees have indicated their willingness to serve if elected. However, if any director nominee should be unable to serve, the shares of common stock represented by proxies may be voted for a substitute nominee designated by our board of directors. Our board of directors has no reason to believe that any of the nominees will be unable to serve if elected.

For each member of our board of directors, including those who are nominees for election as Class II Directors, there follows information given by each concerning his age and length of service as a member of our board of directors, principal occupation and business experience during the past five years and the name of other publicly-held companies of which he serves as a director.

No director or executive officer is related by blood, marriage or adoption to any other director or executive officer. No arrangements or understandings exist between any director or person nominated for election as a director and any other person pursuant to which such person is to be selected as a director or nominee for election as a director.

Board Recommendation

Our board of directors believes that the election of Boudewijn L.P.M. Bollen, J. Breckenridge Eagle and Edwin M. Kania to serve as Class II directors is in the best interests of Aspect Medical Systems, Inc. and our stockholders and, therefore, the board of directors unanimously recommends that the stockholders vote FOR the nominees.

Nominees for Term Expiring at the 2008 Annual Meeting (Class II Directors)

Boudewijn L.P.M. Bollen, age 58, became a director in 1998.

Boudewijn L.P.M. Bollen joined Aspect as a director in 1998. Since January 2002 and from June 1998 to October 1998, Mr. Bollen served as President of International Operations of Aspect. From October 1998 to January 2002, he was a self-employed consultant. From 1986 to 1998, Mr. Bollen held several positions with Mallinckrodt, Inc., a specialty chemicals and healthcare company, and predecessor entities, including Executive Vice President for Worldwide Sales, Service and Distribution, Vice President of European Sales and Marketing and Vice President and Managing Director for Europe. From 1981 to 1986, Mr. Bollen served as Vice President of Marketing and Sales in Europe for Bentley Laboratories, Inc., a manufacturer of specialized monitoring and medical equipment.

J. Breckenridge Eagle, age 55, served as a director from 1988 to 1991 and from 1996 to the present.

J. Breckenridge Eagle joined Aspect as a director in 1988 and served in that position until 1991. He became a director again in 1996 and has served as Chairman of the board of directors since that date. Mr. Eagle served as President and Chief Operating Officer of Aspect in 1996 and as a consultant to Aspect in 1995. From 1989 to 1995, he was President of ECS, Inc., a medical practice management company, which he founded in 1989. From 1981 to 1988, Mr. Eagle was Chief Financial Officer, Vice President and General Manager of The Health Data Institute, Inc., a health care services company, which he co-founded.

Edwin M. Kania, age 47, became a director in 1995.

Edwin M. Kania joined Aspect as a director in 1995. Since December 2000, Mr. Kania has served as Senior Managing Director and Chairman of Flagship Ventures, a venture capital firm, which operates One Liberty Ventures, a venture capital fund. Mr. Kania was a founding general partner and has served as a managing partner of One Liberty Ventures since 1995. Previously, he was a general partner at Morgan Holland Ventures, a predecessor entity of One Liberty Ventures, which he joined in 1985. Mr. Kania also serves as a director of Exact Sciences Corporation.

Directors Whose Term Expires at the 2006 Annual Meeting (Class III Directors)

Nassib G. Chamoun, age 42, became a director in 1987.

Nassib G. Chamoun is a founder of Aspect and has served as a director since 1987. Mr. Chamoun has served as President of Aspect since 1996 and Chief Executive Officer since 1995. He also served as Chairman of the board of directors from 1987 to 1996 and as Chief Scientific Officer from 1991 to 1995. Prior to 1995, Mr. Chamoun also served as our President and Chief Executive Officer at various times since founding Aspect in 1987. From 1984 to 1987, Mr. Chamoun was a fellow in cardiovascular physiology at the Lown Cardiovascular Laboratory of the Harvard School of Public Health.

James J. Mahoney, Jr., age 61, became a director in 2003.

James J. Mahoney, Jr. joined Aspect as a director in March 2003. Since January 2004, Mr. Mahoney has served as President and has managed The Mahoney Group, an investment firm. Mr. Mahoney is a founding partner and principal of HLM Management Company, a private equity firm that invests in small entrepreneurially managed growth stocks and in privately-held venture capital backed companies. From January 1999 to March 2002, Mr. Mahoney managed HLM Management Company's venture capital program and, from April 2002 to April 2004, he acted as a consultant to HLM Management Company. From 1984 to December 1998, Mr. Mahoney co-managed the stock and venture capital portfolios of, and served as Chief Investment Officer of, HLM Management Company. Mr. Mahoney currently serves as advisor to Trellis Partners and Bariston Partners, each of which is an investment firm.

Directors Whose Term Expires at the 2007 Annual Meeting (Class I Directors)

David W. Feigal, Jr., M.D., M.P.H., age 55, became a director in 2004.

David W. Feigal, Jr. joined Aspect as a director in December 2004. In May 2004, Dr. Feigal joined NDA Partners LLC, a firm that consults with biopharmaceutical and medical device businesses on product development matters, where he advises mid-stage device and biopharmaceutical companies about clinical and regulatory strategies, product development and design and the introduction of innovative technologies. Dr. Feigal spent 12 years, from 1992 to April 2004, at the United States Food and Drug Administration where he served in director level positions for the Center for Devices and Radiological Health, the Center for Biologics Evaluation and Research, and the Center for Drug Evaluation and Research. Since 2004, Dr. Feigal has also served as a Research Professor at the Arizona Biodesign Center at Arizona State University. Dr. Feigal was a member of the World Health Organization's Global Program on AIDS and has held faculty appointments at the University of California, San Francisco and the University of California, San Diego schools of medicine.

Richard J. Meelia, age 56, became a director in 2001.

Richard J. Meelia joined Aspect as a director in 2001. Mr. Meelia has served as President and Chief Executive Officer of Tyco Healthcare Group, a medical products company, since July 1995. From 1991 to 1995, he served as President of Kendall Healthcare Products, a medical products company.

Donald R. Stanski, M.D., age 55, became a director in 1996.

Donald R. Stanski joined Aspect as a director in 1996. Dr. Stanski has been a professor of anesthesia at Stanford University since 1979 and is an anesthesiologist/clinical pharmacologist. Since January 2004,

Dr. Stanski has been on public service duty at the United States Food and Drug Administration as a Scientific Advisor for the Director, Center for Drug Evaluation and Research. Since April 2001, Dr. Stanski has also held the position of Chief Medical Officer at Rosa Pharmaceuticals, Inc., a pharmaceutical development company. He served as Chair of the Department of Anesthesia at Stanford University from 1992 to 1997. From July 1998 to June 2001, Dr. Stanski served as the Vice President of Scientific and Medical Programs for Pharsight Corporation, a company that assists in the development of therapeutic products.

Executive Officers of the Corporation

John Coolidge, age 44, became an executive officer in 2004.

John Coolidge joined Aspect in May 1997 and has served as Vice President of Manufacturing since January 2001. Mr. Coolidge served as our Director of Manufacturing from May 1997 to January 2001. From 1995 to 1997, he served as Engineering Manager and was responsible for product development and manufacturing engineering management for the Interventional Vascular business of Medtronic, Inc., a medical technology company. From 1987 to 1995, Mr. Coolidge held a variety of engineering and manufacturing management positions at Johnson and Johnson Medical, Inc., a manufacturer and provider of health care products and services, the most recent of which was Business Unit Manager.

Marc Davidson, age 41, became an executive officer in 2004.

Marc Davidson joined Aspect in December 1999 and has served as Vice President of Engineering since November 2001. Mr. Davidson served as our Director of OEM Engineering from December 1999 to November 2001. From 1985 through 1999, Mr. Davidson held a variety of marketing, engineering, sales and management positions at Hewlett-Packard Company, a manufacturer of computers and medical devices.

Philip H. Devlin, age 48, became an executive officer in 1994.

Philip H. Devlin joined Aspect in 1990 and has served as Vice President and General Manager of Neuroscience since November 2001. From 1994 to November 2001, Mr. Devlin served as Vice President of Research and Development of Aspect, and from 1990 to 1994, he held the position of Director of Product Development of Aspect. From 1984 to 1985 and from 1986 to 1990, Mr. Devlin served as Software Engineer and Manager of Software Engineering at Lifeline Systems, Inc., a medical products and communications company. From 1980 to 1984, he held the position of Chief Biomedical Engineer at Beth Israel Hospital in Boston, Massachusetts and from 1985 to 1986, he served as Technical Marketing Engineer in the Medical Product Group of Hewlett-Packard Company, a manufacturer of computers and medical devices.

Michael Falvey, age 46, became an executive officer in 2004.

Michael Falvey joined Aspect in March 2004. In February 2005, Mr. Falvey was appointed Vice President, Chief Financial Officer, Secretary and Treasurer. Mr. Falvey served as Vice President, Finance from March 2004 until his appointment as Vice President, Finance and Chief Financial Officer. From August 2003 to March 2004, Mr. Falvey was a self-employed consultant. From 1999 to July 2003, Mr. Falvey served as Vice President, Finance for Millennium Pharmaceuticals, a biopharmaceutical company. From 1991 to 1999, he held financial management positions at Fidelity Investments, an investment management company. From 1988 to 1991, he held financial management positions at Digital Equipment Corporation, a manufacturer of computers, and from 1982 to 1986, he held various financial positions at General Electric, a diversified industrial company.

William Floyd, age 48, became an executive officer in 2001.

William Floyd joined Aspect in May 2001 and has served as Vice President of Sales and Marketing since September 2002. Mr. Floyd served as Vice President of Marketing from May 2001 to September 2002. From May 2000 to May 2001, Mr. Floyd was Principal of Casco Scientific, LLC, a medical device consulting group. From 1992 to 2000, Mr. Floyd held a variety of positions with Boston Scientific Corporation, a manufacturer of medical devices, the most recent of which was Vice President of Marketing, Microvasive Division.

Scott D. Kelley, M.D., age 46, became an executive officer in 2000.

Scott D. Kelley joined Aspect in July 2000 and has served as Vice President and Medical Director since that time. Prior to joining Aspect, Dr. Kelley served as an Associate Professor of Clinical Anesthesia and Director of Liver Transplant at the University of California, San Francisco Medical School from 1990 to 2000.

Paul J. Manberg, Ph.D., age 50, became an executive officer in 1991.

Paul J. Manberg joined Aspect in 1991 and has served as Vice President of Clinical, Regulatory and Quality Assurance since 1991. From 1984 to 1990, Dr. Manberg held a variety of clinical research positions at Serono Laboratories, a pharmaceutical company, including Vice President, Research and Development. From 1979 to 1984, he was employed as a Clinical Research Scientist at Burroughs — Wellcome Company, a pharmaceutical company, and served as an Adjunct Research Scientist at the University of North Carolina.

For additional information relating to our executive officers, see the disclosure regarding Messrs. Bollen, Chamoun and Eagle set forth under the heading "Election of Directors." No arrangements or understandings exist between any executive officer and any other person pursuant to which such executive officer is to be selected as an executive officer.

For information relating to shares of our common stock owned by each of our directors, our chief executive officer and our four most highly compensated executive officers and all directors and executive officers as a group, see the disclosure set forth under the heading "Stock Ownership Information."

CORPORATE GOVERNANCE

General

We believe that good corporate governance is important to ensure that Aspect is managed for the long-term benefit of its stockholders. During the past year, we have continued to review our corporate governance policies and practices and compare them to those suggested by various authorities in corporate governance and the practices of other public companies. We have also considered the provisions of the Sarbanes-Oxley Act of 2002, the new rules of the SEC and the listing standards of the Nasdaq Stock Market.

Based on our review, in April 2004 we took steps to implement many of the new and proposed rules and to comply with the new listing standards. In particular, we adopted new charters for our Audit Committee, Compensation Committee and Corporate Governance and Nominating Committee. We also adopted new corporate governance guidelines as well as a new code of business conduct and ethics, which applies to all of our officers, directors and employees. This section describes key corporate governance guidelines and practices that we have adopted.

Board Determination of Independence

Under applicable Nasdaq rules, a director will only qualify as an "independent director" if, in the opinion of the board of directors, that person does not have a relationship which would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. The board of directors has determined that none of Dr. Feigal, Mr. Kania, Mr. Mahoney, Mr. Meelia or Dr. Stanski has a relationship which would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is an "independent director" as defined under Rule 4200(a)(15) of the Nasdaq Stock Market, Inc. Marketplace Rules.

Director Candidates

The process followed by our Corporate Governance and Nominating Committee to identify and evaluate director candidates includes requests to board members and others for recommendations, meetings from time to time to evaluate biographical information and background material relating to potential candidates and interviews of selected candidates by members of the Corporate Governance and Nominating Committee and the board of directors.

In considering whether to recommend any particular candidate for inclusion in the board of directors' slate of recommended director nominees, the Corporate Governance and Nominating Committee applies the criteria set forth in our corporate governance guidelines. These criteria include the candidate's integrity, business acumen, knowledge of our business and industry, age, experience, diligence, conflicts of interest and the ability to act in the interests of all stockholders. The Corporate Governance and Nominating Committee does not assign specific weights to particular criteria and no particular criterion is a prerequisite for each prospective nominee. Our corporate governance guidelines also provide that any director who reaches the age of 75 while serving as a director will retire from our board of directors effective at the end of his or her then current term. We believe that the backgrounds and qualifications of our directors, considered as a group, should provide a composite mix of experience, knowledge and abilities that will allow the board of directors to fulfill its responsibilities.

Stockholders may recommend individuals to the Corporate Governance and Nominating Committee for consideration as potential director candidates by submitting their names, together with appropriate biographical information and background materials and a statement as to whether the stockholder or group of stockholders making the recommendation has beneficially owned more than 5% of our common stock for at least a year as of the date such recommendation is made, to Chairman, Corporate Governance and Nominating Committee, c/o Aspect Medical Systems, Inc., 141 Needham Street, Newton, Massachusetts 02464. Assuming that appropriate biographical and background material has been provided on a timely basis, the Corporate Governance and Nominating Committee will evaluate stockholder-recommended candidates by following substantially the same process, and applying substantially the same criteria, as it follows for candidates submitted by others. If the board of directors determines to nominate a stockholder-recommended candidate and recommends his or her election, then his or her name will be included in the proxy card for the next Annual Meeting of Stockholders.

Stockholders also have the right under our by-laws to nominate director candidates directly, without any action or recommendation on the part of the Corporate Governance and Nominating Committee or the board of directors, by following the procedures set forth in the second paragraph under "Stockholder Proposals" below. Candidates nominated by stockholders in accordance with the procedures set forth in our by-laws will not be included in the proxy card for the next Annual Meeting of Stockholders.

Communicating with the Independent Directors

The board of directors will give appropriate attention to written communications that are submitted by stockholders, and will respond if and as appropriate. The Chairman of the Corporate Governance and Nominating Committee is primarily responsible for monitoring communications from stockholders and for providing copies or summaries to the other directors as he considers appropriate.

Communications will be forwarded to all directors if they relate to important substantive matters and include suggestions or comments that the Chairman of the Corporate Governance and Nominating Committee considers to be important for the directors to know. In general, communications relating to corporate governance and long-term corporate strategy are more likely to be forwarded than communications relating to ordinary business affairs, personal grievances and matters as to which we tend to receive repetitive or duplicative communications.

Stockholders who wish to send communications on any topic to the board of directors should address such communications to Chairman, Corporate Governance and Nominating Committee, c/o Aspect Medical Systems, Inc., 141 Needham Street, Newton, MA 02464.

Board of Directors Meetings

The board of directors has responsibility for establishing broad corporate policies and reviewing our overall performance rather than day-to-day operations. Our board of directors' primary responsibility is to oversee the management of the company and, in doing so, serve the best interests of the company and its stockholders. The board of directors selects, evaluates and provides for the succession of executive officers and, subject to stockholder election, directors. It reviews and approves corporate objectives and strategies, and

evaluates significant policies and proposed major commitments of corporate resources. Our board of directors also participates in decisions that have a potential major economic impact on Aspect. Management keeps the directors informed of company activity through regular communication, including written reports and presentations at board of directors and committee meetings.

During the fiscal year ended December 31, 2004, our board of directors met seven times. Each of our directors attended at least 75% of the aggregate of the total number of meetings of the board of directors and the total number of meetings held by all committees of the board of directors on which he served during the fiscal year ended December 31, 2004. In April 2004, we amended our corporate governance guidelines to provide that our directors will be encouraged to attend our Annual Meetings of Stockholders in the event that we believe that their attendance at those meetings is warranted. Two of our directors attended the 2004 Annual Meeting of Stockholders.

Board Committees

The board of directors has established three standing committees — Audit, Compensation, and Corporate Governance and Nominating — each of which operates under a charter that has been approved by the board of directors. Current copies of each committee's charter are posted on the "Investors" section of our website, www.aspectmedical.com.

Our board of directors has determined that all of the members of each of the board's three standing committees are independent as defined under the rules of the Nasdaq Stock Market, and, in the case of all members of the Audit Committee, the independence requirements contemplated by Rule 10A-3 under the Securities Exchange Act of 1934.

Audit Committee

The Audit Committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm,
- overseeing the work of our registered public accounting firm, including through the receipt and consideration of certain reports from registered our public accounting firm,
- reviewing and discussing with management and the registered public accounting firm our annual and quarterly financial statements and related disclosures,
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics,
- discussing our risk management policies,
- establishing policies regarding hiring employees from the registered public accounting firm and procedures for the receipt and retention of accounting related complaints and concerns,
- meeting independently with our registered public accounting firm and management, and
- preparing the audit committee report required by SEC rules (which is included in this Proxy Statement).

Our board of directors has determined that each of Mr. Mahoney (Chairman), Mr. Kania and Mr. Meelia, each a member of the Audit Committee, is an "audit committee financial expert" as defined in Item 401(h) of Regulation S-K. The Audit Committee met seven times during the fiscal year ended December 31, 2004.

Compensation Committee

The Compensation Committee's responsibilities include:

- annually reviewing and approving corporate goals and objectives relevant to our Chief Executive Officer's compensation,

- determining our Chief Executive Officer's compensation,
- reviewing and approving, or making recommendations to the board of directors with respect to, the compensation of the our other executive officers,
- overseeing an evaluation of our senior executives,
- overseeing and administering our cash and equity incentive plans, and
- reviewing and making recommendations to the board of directors with respect to director compensation.

The current members of the Compensation Committee are Mr. Meelia (Chairman), Mr. Mahoney and Dr. Stanski. During the fiscal year ended December 31, 2004, the Compensation Committee consisted of Mr. Meelia, Mr. Kania and Dr. Stanski. On February 17, 2005, Mr. Kania stepped down from, and the board of directors elected Mr. Mahoney to, the Compensation Committee. The Compensation Committee met two times during the fiscal year ended December 31, 2004.

Corporate Governance and Nominating Committee

The Corporate Governance and Nominating Committee's responsibilities include:

- identifying individuals qualified to become members of our board of directors,
- recommending to the board of directors the persons to be nominated for election as directors and to each of the board's committees,
- reviewing and making recommendations to the board of directors with respect to management succession planning,
- developing and recommending to the board of directors corporate governance principles, and
- overseeing evaluation of the board of directors.

The current members of the Corporate Governance and Nominating Committee are Mr. Kania (Chairman), Dr. Feigal and Dr. Stanski. During the fiscal year ended December 31, 2004, the Corporate Governance and Nominating Committee consisted of Mr. Kania (Chairman), Mr. Mahoney and Mr. Meelia. On February 17, 2005, Messrs. Mahoney and Meelia stepped down from, and the board of directors elected Drs. Feigal and Stanski to, the Corporate Governance and Nominating Committee. The Corporate Governance and Nominating Committee met one time during the fiscal year ended December 31, 2004.

Report of the Audit Committee

The Audit Committee of the board of directors is currently composed of three members and acts under a written charter. During the fiscal year ended December 31, 2004, the Audit Committee consisted of Mr. Kania, Mr. Mahoney and Mr. Meelia. Management is responsible for the preparation of the financial statements and for maintaining an adequate system of disclosure controls and procedures and internal control over financial reporting for that purpose. The Company's registered public accounting firm is responsible for conducting an independent audit of the annual financial statements in accordance with generally accepted accounting principles and issuing a report on the results of their audit. The Audit Committee is responsible for providing independent, objective oversight of these processes.

In response to the requirements of Section 404 of The Sarbanes-Oxley Act of 2002 and related rules and regulations, management completed the documentation, testing and evaluation of Aspect's system of internal control over financial reporting for the year ended December 31, 2004. The Audit Committee provided oversight and guidance to management and financial personnel during the testing and evaluation process. In connection with this oversight, both management and the registered public accounting firm regularly provided updates to the Audit Committee at Audit Committee meetings. At the conclusion of the process, management presented to the Audit Committee for its review a report on the effectiveness of Aspect's internal control over financial reporting. The Committee also reviewed the registered public accounting firm's report

included in the Annual Report on Form 10-K for the year ended December 31, 2004 related to their audit of (i) management's assessment of the effectiveness of internal control over financial reporting and (ii) the effectiveness of internal control over financial reporting. The Audit Committee will continue to oversee the efforts pertaining to internal control over financial reporting and management's preparations for the evaluation of internal controls in the fiscal year ended December 31, 2005.

The Audit Committee also reviews, evaluates and discusses with management, internal accounting and financial personnel and the registered public accounting firm our annual and quarterly financial statements and related disclosures.

The Audit Committee has reviewed the audited financial statements for the fiscal year ended December 31, 2004, and has discussed these financial statements with management and the registered public accounting firm.

The Audit Committee has also received from, and discussed with, our registered public accounting firm various communications that our registered public accounting firm is required to provide to the Audit Committee, including the matters required to be discussed by Statement on Auditing Standards 61 (Communication with Audit Committees), or SAS 61. SAS 61 (as codified in AU Section 380 of the Codification of Statements on Auditing Standards) requires the registered public accounting firm to discuss with the Audit Committee, among other things, the following:

- methods to account for significant unusual transactions,
- the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus,
- the process used by management in formulating particularly sensitive accounting estimates and the basis for the auditors' conclusions regarding the reasonableness of those estimates, and
- disagreements with management over the application of accounting principles, the basis for management's accounting estimates and the disclosures in the financial statements.

The Company's registered public accounting firm also provided the Audit Committee with the written disclosures and the letter required by Independence Standards Board Standard No. 1 (Independence Discussions with Audit Committees). Independence Standards Board Standard No. 1 requires auditors annually to disclose in writing all relationships that in the auditors' professional opinion may reasonably be thought to bear on independence, confirm their perceived independence and engage in a discussion of independence. The Audit Committee has discussed with the registered public accounting firm their independence from Aspect.

Based on its discussions with management and the registered public accounting firm, and its review of the representations and information provided by management and the registered public accounting firm, the Audit Committee recommended to the board of directors that the audited financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2004.

Audit Committee

James J. Mahoney, Jr. (Chairman)
Edwin M. Kania
Richard J. Meelia

Registered Public Accounting Firm's Fees

Ernst & Young LLP audited our financial statements for the fiscal years ended December 31, 2003 and December 31, 2004. The following table summarizes the fees that Ernst & Young LLP billed to us for each of the last two fiscal years for audit services and for other services:

<u>Fee Category</u>	<u>2004</u>	<u>2003</u>
Audit Fees	\$428,800	\$233,000
Audit-Related Fees	\$ 11,500	\$ 11,000
Tax Fees	\$ 38,100	\$ 55,300
All Other Fees	\$ —	\$ —
Total Fees	<u>\$478,400</u>	<u>\$299,300</u>

Audit Fees

Audit fees consist of fees for the audit of our financial statements, the review of the interim financial statements included in our quarterly reports on Form 10-Q, and other professional services provided in connection with statutory and regulatory filings or engagements.

Audit-Related Fees

Audit-related fees consist of fees for assurance and related services that are reasonably related to the performance of the audit and the review of our financial statements and which are not reported under "Audit Fees." These services relate to employee benefit audits. None of the audit-related fees billed in 2004 and 2003 related to services provided under the *de minimus* exception to the audit committee pre-approval requirements.

Tax Fees

Tax fees consist of fees for tax compliance, tax advice and tax planning services. Tax compliance services, which relate to preparation of original and amended tax returns, accounted for \$29,200 of the total tax fees paid for 2004 and \$27,100 of the total tax fees paid for 2003. Tax advice and tax planning services relate to assistance with tax audits and appeals and employee benefit plans. None of the tax fees billed in 2004 and 2003 related to services provided under the *de minimus* exception to the audit committee pre-approval requirements.

All Other Fees

We did not incur any fees that may be classified as "All Other Fees" during 2004 or 2003.

The percentage of hours expended by Ernst & Young LLP on the audit of our financial statements for the fiscal year ended December 31, 2004 attributed to work performed by persons other than Ernst & Young LLP's full-time, permanent employees did not exceed fifty percent.

Pre-Approval Policy and Procedures

The Audit Committee has adopted policies and procedures relating to the approval of all audit and non-audit services that are to be performed by our registered public accounting firm. This policy generally provides that Aspect will not engage its registered public accounting firm to render audit or non-audit services unless the service is specifically approved in advance by the Audit Committee or the engagement is entered into pursuant to one of the pre-approval procedures described below.

From time to time, the Audit Committee may pre-approve specified types of services that are expected to be provided to Aspect by its registered public accounting firm during the next 12 months. Any such pre-approval is detailed as to the particular service or type of services to be provided and is also generally subject to a maximum dollar amount.

The Audit Committee may also delegate to each individual member of the Audit Committee the authority to approve any audit or non-audit services to be provided to Aspect by its registered public accounting firm. Any approval of services by a member of the Audit Committee pursuant to this delegated authority is reported on at the next meeting of the Audit Committee.

Compensation of Directors

We reimburse our non-employee directors for reasonable out-of-pocket expenses incurred in attending meetings of the board of directors or any committee of the board of directors. Non-employee directors also receive:

- a \$10,000 annual retainer,
- an \$8,000 annual retainer for service as chair of the Audit Committee,
- a \$4,000 annual retainer for service as chair of the Compensation Committee,
- a \$4,000 annual retainer for service as chair of the Corporate Governance and Nominating Committee,
- \$1,500 for each board meeting attended in person,
- \$500 for each board meeting attended by telephone,
- \$1,000 for each meeting of the Audit Committee, Compensation Committee or Corporate Governance and Nominating Committee attended in person, and
- \$500 for each meeting of the Audit Committee, Compensation Committee or Corporate Governance and Nominating Committee attended by telephone.

No director who also serves as an employee receives compensation for services rendered as a director. We currently have five non-employee directors on our board of directors: Dr. Feigal, Mr. Kania, Mr. Mahoney, Mr. Meelia and Dr. Stanski.

In addition, our non-employee directors are eligible to receive non-statutory stock options under our 1998 Director Stock Option Plan. Our 1998 Director Stock Option Plan was initially adopted by our board of directors and stockholders in February 1998 and was subsequently amended in December 1999 to increase the number of shares of common stock authorized under the plan from 100,000 to 200,000 shares. Under the 1998 Director Stock Option Plan, each non-employee director is eligible to receive a non-statutory stock option to purchase 10,000 shares of common stock on the date of his or her election to the board of directors. The Plan also authorizes each non-employee director to receive a non-statutory stock option to purchase 5,000 shares of our common stock on the date of each annual meeting of stockholders.

All options granted pursuant to our 1998 Director Stock Option Plan to directors upon their initial election to our board of directors are exercisable as to 50% of the shares underlying such option immediately upon such director's election and the remainder are exercisable in equal annual installments on each of the first, second and third anniversaries of the date of grant, provided that the optionee continues to serve as a director on each such anniversary of the grant date. All options granted pursuant to our 1998 Director Stock Option Plan to directors serving as directors on the date of our annual meeting are exercisable in three equal annual installments on each of the first, second and third anniversaries of the date of grant, provided that the optionee continues to serve as a director on each such anniversary of the grant date.

Pursuant to our 1998 Director Stock Option Plan, during the fiscal year ended December 31, 2004, we granted stock options to purchase shares of our common stock as follows:

<u>Name</u>	<u>Number of Shares Underlying Options</u>	<u>Exercise Price</u>	<u>Grant Date</u>
Mr. Kania.....	5,000	\$15.16	5/25/04
Mr. Mahoney.....	5,000	15.16	5/25/04
Mr. Meelia.....	5,000	15.16	5/25/04
Dr. Stanski.....	5,000	15.16	5/25/04
Dr. Feigal.....	10,000	23.62	12/16/04

The exercise prices for the foregoing option grants were equal to the fair market value of our common stock, as reported on the Nasdaq National Market on the date of grant.

In November 2004, our board of directors, upon the recommendation of the Compensation Committee, determined to increase the option award made to each non-employee director (i) on the date of each annual meeting from an option to purchase 5,000 shares of common stock to an option to purchase 7,500 shares of common stock, provided such director had then served at least six months, and (ii) on the date of his or her election to the board of directors from an option to purchase 10,000 shares of common stock to an option to purchase 20,000 shares of common stock. Accordingly, on December 16, 2004, in addition to the award made to Dr. Feigal pursuant to the 1998 Director Option Plan, described above, we also granted a stock option pursuant to our 2001 Stock Incentive Plan to Dr. Feigal to purchase 10,000 shares of our common stock. The exercise price for this option was \$23.62 per share, which is equal to the fair market value of our common stock, as reported on the Nasdaq National Market on the date of grant.

Subject to stockholder approval of Proposal Two at the 2005 Annual Meeting of Stockholders, the 1998 Director Stock Option Plan will be amended, restated and renamed the Amended and Restated 1998 Director Equity Incentive Plan. For a description of our proposed Amended and Restated 1998 Director Equity Incentive Plan, please see "Proposal Two — Approval of the Amended and Restated 1998 Director Equity Incentive Plan" beginning on page 22.

For a description of our 2001 Stock Incentive Plan, please see "Proposal Three — Approval of Amendment of 2001 Stock Incentive Plan" beginning on page 25.

Certain Relationships and Related Transactions

On April 7, 2004, we entered into a stock purchase agreement with Boston Scientific Corporation pursuant to which we agreed to issue and sell to Boston Scientific Corporation an aggregate of 500,000 shares of our common stock at a purchase price of \$16.21 per share. We completed the sale of the 500,000 shares of our common stock on June 8, 2004 which resulted in gross cash proceeds to us of approximately \$8.1 million. As of December 31, 2004, Boston Scientific Corporation held approximately 23.9% of our outstanding common stock.

During 2004, Mr. Chamoun paid to us \$716,340, which represented the remaining outstanding principal and all accrued interest due and owing under various loans made by us to Mr. Chamoun in 1998, 2000 and 2001. Currently, there are no outstanding loans due to us from Mr. Chamoun.

We have adopted a policy providing that all material transactions between us and our officers, directors and other affiliates must be:

- approved by a majority of the members of our board of directors and by a majority of the disinterested members of our board of directors, and
- on terms no less favorable to us than could be obtained from unaffiliated third parties.

For executive officer compensation and option exercise information, see “Information About Executive Compensation — Compensation of Executive Officers” and “Information About Executive Compensation — Report of the Compensation Committee.”

INFORMATION ABOUT EXECUTIVE COMPENSATION

Compensation of Executive Officers

Summary Compensation Table. The following table sets forth certain information concerning annual and long-term compensation for services rendered to us for the fiscal years ended December 31, 2004, 2003 and 2002, by our chief executive officer and our four other most highly compensated executive officers who were serving as executive officers on December 31, 2004, whom we collectively refer to as our named executive officers.

SUMMARY COMPENSATION TABLE

Name and Principal Position	Fiscal Year	Annual Compensation			Long-Term Compensation	All Other Compensation
		Salary	Bonus	Other Annual Compensation(\$)	Awards	
					Number of Securities Underlying Options	
Nassib G. Chamoun Chief Executive Officer and President	2004	\$250,000	\$203,156	—	100,000	—
	2003	\$250,000	\$200,000	—	56,250	—
	2002	\$250,000	\$262,500	—	95,000	—
Boudewijn L.P.M. Bollen President of International Operations	2004	\$359,136(1)	\$155,436(1)	\$ 6,025(2)	30,000	\$31,555(3)
	2003	\$326,114(1)	\$150,000(1)	\$ 2,870(2)	42,500	\$37,053(3)
	2002	\$249,614(1)	\$120,000(1)	\$ 2,241(2)	140,000	\$25,382(3)
J. Neal Armstrong Vice President, Investor Relations(4)	2004	\$215,000	\$145,595	—	27,500	—
	2003	\$215,000	\$150,000	—	22,500	—
	2002	\$215,000	\$125,000	—	45,000	—
Scott D. Kelley, M.D. Vice President and Medical Director	2004	\$205,000	\$133,294	—	30,000	—
	2003	\$205,000	\$125,000	—	33,750	—
	2002	\$205,000	\$ 80,000	\$14,019(5)	52,500	—
William Floyd Vice President of Sales and Marketing	2004	\$185,000	\$170,252	—	30,000	—
	2003	\$185,000	\$149,500	—	38,750	—
	2002	\$185,000	\$ 92,500	—	70,000	—

- (1) All of Mr. Bollen’s compensation was paid by us in euros and the amounts reported reflect the conversion of Mr. Bollen’s compensation using the average exchange rate of euros to U.S. dollars during the fiscal year reported. For each of fiscal years ended December 31, 2004 and 2003, Mr. Bollen’s salary was €288,000 and for the fiscal year ended December 31, 2002, his salary was €277,000. Mr. Bollen’s bonus is determined in U.S. dollars.
- (2) Reflects the amount contributed by us to Mr. Bollen’s privately paid medical insurance plan.
- (3) Consists of the amount we paid for Mr. Bollen’s pension benefits.
- (4) Mr. Armstrong served as our Vice President, Chief Financial Officer, Secretary and Treasurer until February 9, 2005.
- (5) Reflects amount of indebtedness forgiven on October 31, 2002 pursuant to the terms of the loan agreement that we entered into with Dr. Kelley on October 31, 2000. This loan is no longer outstanding.

Option Grants Table. The following table sets forth certain information concerning grants of stock options to purchase shares of our common stock made to the named executive officers during the fiscal year ended December 31, 2004.

OPTION GRANTS IN LAST FISCAL YEAR

Name	Individual Grants				Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation For Option Term (3)	
	Number of Securities Underlying Options Granted (#) (1)	% of Total Options Granted to Employees in Fiscal Year(2)	Exercise Price (\$/Share)	Expiration Date	5%(\$)	10%(\$)
Nassib G. Chamoun	100,000	9.7	\$15.66	2/3/2014	\$984,849	\$2,495,801
Boudewijn L.P.M. Bollen	30,000	2.9	\$15.66	2/3/2009	\$295,455	\$ 748,740
J. Neal Armstrong	27,500	2.7	\$15.66	2/3/2014	\$270,833	\$ 686,345
Scott D. Kelley, M.D.	30,000	2.9	\$15.66	2/3/2014	\$295,455	\$ 748,740
William Floyd	30,000	2.9	\$15.66	2/3/2014	\$295,455	\$ 748,740

- (1) We granted these stock options on February 4, 2004. One-eighth of the shares of common stock underlying each of these stock options is exercisable six months after the date of grant, and the remaining stock options vest monthly thereafter over a forty-two month period. Each option has an exercise price equal to the fair market value per share of our common stock on the date of grant.
- (2) During the fiscal year ended December 31, 2004, we granted stock options to purchase an aggregate of 1,031,750 shares of our common stock to our employees, including our executive officers.
- (3) Amounts reported in these columns represent amounts that may be realized upon exercise of the stock options immediately prior to the expiration of their term assuming the specified compounded rates of appreciation (5% and 10%) on our common stock over the term of the stock options, net of exercise price. These numbers are calculated based on rules promulgated by the SEC and do not reflect our estimate of future stock price growth. Actual gains, if any, on stock option exercises and common stock holdings are dependent on the timing of the exercise and the future performance of our common stock.

Aggregated Option Exercises and Fiscal Year-End Option Value Table. The following table sets forth certain information regarding the exercise of stock options during the fiscal year ended December 31, 2004 and the number and value of unexercised options held as of December 31, 2004 by the named executive officers.

AGGREGATED OPTION EXERCISES IN LAST FISCAL YEAR AND FISCAL YEAR-END OPTION VALUES

Name	Shares Acquired on Exercise (#)	Value Realized (\$) (1)	Number of Securities Underlying Unexercised Options at Fiscal Year-End (#)	Value of Unexercised In-The-Money Options at Fiscal Year-End (\$) (2)
			Exercisable/Unexercisable	Exercisable/Unexercisable
Nassib G. Chamoun	7,243	\$139,784	338,688/129,374	\$4,875,024/\$1,670,117
Boudewijn L.P.M. Bollen . .	59,844	\$929,347	115,260/87,396	\$1,569,322/\$1,247,161
J. Neal Armstrong	0	0	227,292/38,125	\$ 3,553,504/\$579,156
Scott D. Kelley, M.D.	8,125	\$176,069	166,564/61,561	\$ 1,462,599/\$889,936
William Floyd	33,340	\$519,703	132,755/82,655	\$1,677,867/\$1,221,401

- (1) Value represents the difference between the exercise price per share and the fair market value per share of our common stock on the date of exercise, multiplied by the number of shares acquired on exercise.
- (2) Value is based on the difference between the closing sale price per share of our common stock on the Nasdaq National Market on December 31, 2004, the last trading day of the fiscal year ended

December 31, 2004 (\$24.46), and the applicable option exercise price, multiplied by the number of shares subject to the option.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information as of December 31, 2004 about the securities authorized for issuance under our equity compensation plans, consisting of our 2001 Stock Incentive Plan, our 1998 Stock Incentive Plan, our 1998 Director Stock Option Plan, our Amended and Restated 1991 Stock Option Plan and our 1999 Employee Stock Purchase Plan. All of our equity compensation plans were adopted with the approval of our stockholders.

Equity Compensation Plan Information

Plan Category	(a)	(b)	(c)
	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (1)
Equity compensation plans approved by stockholders	1,514,473	\$11.20	2,567,676
Equity compensation plans not approved by stockholders	—	—	—
Total	1,514,473	\$11.20	2,567,676

(1) Includes 2,295,678 shares of our common stock issuable under our 2001 Stock Incentive Plan, 49,163 shares of our common stock issuable under our 1998 Stock Incentive Plan, 70,002 shares of our common stock issuable under our 1998 Director Stock Option Plan, 32,481 shares of our common stock issuable under our Amended and Restated 1991 Stock Option Plan and 120,352 shares of our common stock issuable under our 1999 Employee Stock Purchase Plan.

Report of the Compensation Committee

Our executive compensation program is administered by the Compensation Committee which is currently composed of three members. During the fiscal year ended December 31, 2004, the Compensation Committee consisted of Mr. Kania, Mr. Meelia and Dr. Stanksi. On February 17, 2005, Mr. Kania stepped down from, and the board of directors elected Mr. Mahoney to, the Compensation Committee.

Our executive compensation program is designed to attract, retain and reward executives who can help us achieve our business objectives in this competitive and rapidly changing industry and thereby maximize stockholder returns. The Compensation Committee establishes compensation policies for the president and chief executive officer, Mr. Chamoun; the chairman of the board of directors, Mr. Eagle; and our chief financial officer, currently Mr. Falvey and, until his resignation from such position on February 9, 2005, Mr. Armstrong. In addition, Mr. Chamoun recommends compensation packages for the remaining executive officers for determination by the Compensation Committee. All decisions by the Compensation Committee relating to the compensation of our executive officers are reviewed by our full board of directors.

This report is submitted by the Compensation Committee and addresses the compensation policies for the fiscal year ended December 31, 2004 as they affected Mr. Chamoun and our other executive officers.

Compensation Philosophy

The objectives of the executive compensation program are to align the interests of management with the interests of stockholders through a system that relates compensation to business objectives and individual performance. Our executive compensation philosophy is based on the following principles:

- **Competitive and Fair Compensation**

We are committed to providing an executive compensation program that helps us to attract, motivate and retain highly qualified and industrious executives. Our policy is to provide total compensation that is competitive for comparable work and comparable corporate performance. To this end, we regularly compare our compensation packages with those of other companies in the industry and set our compensation guidelines based on this review. We also seek to achieve a balance of the compensation paid to a particular individual and the compensation paid to our other executives and employees.

- **Sustained Performance**

Executive officers are rewarded based upon an assessment of corporate, business group and individual performance. Corporate performance and business group performance are evaluated by reviewing the extent to which strategic and business plan goals are met, including such factors as achievement of operating budgets, establishment of strategic development alliances with third parties, timely development and introduction of new processes and products and performance relative to competitors. Individual performance is evaluated by reviewing attainment of specified individual objectives and the degree to which teamwork and our other values are fostered.

In evaluating each executive officer's performance, we generally conform to the following process:

- business and individual goals and objectives are set for each performance cycle,
- at the end of the performance cycle, the accomplishment of the executive's goals and objectives and his contributions to Aspect are evaluated,
- the executive's performance is then compared with peers within Aspect and the results are communicated to the executive, and
- the comparative results, combined with comparative compensation practices of other companies in the industry, are then used to determine salary and stock compensation levels.

Annual compensation for our executives generally consists of three elements: salary, bonus and equity based awards.

Salary for our executives is generally set by reviewing compensation for comparable positions in the market and the historical compensation levels of our executives. Annual salaries are based on actual corporate and individual performance vis-à-vis targeted performance criteria and various subjective performance criteria. Targeted performance criteria vary for each executive based on his business group or area of responsibility, and may include:

- achievement of the operating budget for Aspect as a whole or of a business group of Aspect,
- continued innovation in development and commercialization of our technology,
- timely development, regulatory approval and commercial introduction of new products or processes or expanded uses of existing products,
- development and implementation of successful marketing and commercialization strategies, and
- implementation of financing strategies and establishment of strategic development alliances with third parties.

Subjective performance criteria include an executive's ability to motivate others, develop the skills necessary to grow as we mature, recognize and pursue new business opportunities and initiate programs to enhance our growth and success. The Compensation Committee does not rely on a formula that assigns a pre-

determined value to each of the criteria, but instead evaluates an executive officer's contribution in light of all criteria. Base salaries for our executive officers did not increase for the fiscal year ended December 31, 2004 as compared to the fiscal year ended December 31, 2003.

Bonuses totaling \$1,542,200 were paid to our executive officers for the fiscal year ended December 31, 2004.

Compensation for executive officers also includes the long-term incentives afforded by stock options and restricted stock awards. Our equity compensation program is designed to align the long-term interests of our employees and our stockholders and assist in the retention of executives. The size of equity awards is generally intended to reflect the executive's position with us and his contributions to us, including his success in achieving the individual performance criteria described above. We generally grant options and restricted stock awards with monthly vesting or forfeiture schedules over a four-year period (however, the options may not be exercised and the restrictions on restricted stock awards do not lapse during the first six months after they are granted) to encourage key employees to continue their employment with us. During the fiscal year ended December 31, 2004, we granted stock options to purchase an aggregate of 521,000 shares of our common stock to executive officers at a weighted average exercise price of \$15.48 per share. All stock options granted to executive officers during the fiscal year ended December 31, 2004 were granted at fair market value on the date of grant.

Executive officers are also eligible to participate in our employee stock purchase plan. The purchase plan is available to virtually all of our employees and generally permits participants to purchase shares of our common stock at a discount of 15% from the fair market value at the beginning or end of the applicable purchase periods permitted under the purchase plan.

Compliance with Internal Revenue Code Section 162(m)

Section 162(m) of the Internal Revenue Code (the "Code") generally disallows a tax deduction to public companies for compensation over \$1 million paid to a corporation's chief executive officer and four other most highly compensated executive officers. Qualifying performance-based compensation will not be subject to the deduction limit if certain requirements are met. We generally seek to structure the performance-based portion of the compensation of our executive officers, which currently consists solely of stock option grants and restricted stock awards, in a manner that complies with Section 162(m) of the Code so as to mitigate any disallowance of deductions. There can be no assurance that compensation attributable to stock options granted under our stock incentive plans will be exempt from Section 162(m) as qualifying performance-based compensation. In addition, the Compensation Committee has the authority to authorize compensation payments that may be subject to the limit where the Compensation Committee believes that such payments are appropriate and in the best interests of Aspect and our stockholders, after taking into consideration changing business conditions and the performance of our officers.

Mr. Chamoun's 2004 Compensation

Mr. Chamoun is eligible to participate in the same executive compensation plans available to the other executive officers. The Compensation Committee believes that Mr. Chamoun's annual compensation, including the portion of his compensation based upon our stock option program, has been set at a level competitive with other companies in the industry.

Mr. Chamoun's salary was \$250,000 for the fiscal year ended December 31, 2004. Mr. Chamoun received a bonus of \$203,156 in February 2005 for his performance during the fiscal year ended December 31, 2004. In determining Mr. Chamoun's compensation, the Compensation Committee considered:

- The first full year of profitability for the Company in 2004,
- The increase in worldwide revenues in 2004 of 26% as compared to 2003 worldwide revenues,
- The increase in worldwide monitor and module unit sales of 16% as compared to 2003 worldwide monitor and module unit sales,

- The completion of the sale of shares of common stock to Boston Scientific in June 2004 resulting in proceeds to Aspect of approximately \$8.1 million,
- Other successes, including:
 - Publication of awareness data,
 - Designation of Aspect as small company medical device manufacturer of the year by Medical Device and Diagnostic Magazine, and
 - successful marketing efforts by Aspect following clearance in late 2003 by the United States Food and Drug Administration of an awareness indication for BIS monitoring.

Compensation Committee

Richard J. Meelia (Chairman)
James J. Mahoney, Jr.
Donald R. Stanski, M.D.

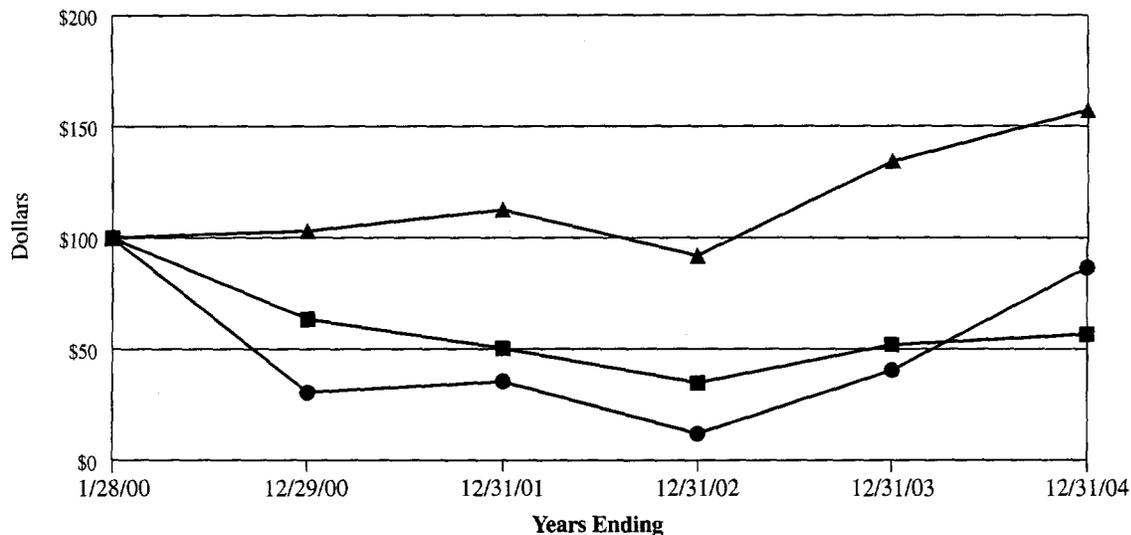
Compensation Committee Interlocks and Insider Participation

The members of the Compensation Committee during the fiscal year ended December 31, 2004 were Messrs. Kania and Meelia and Dr. Stanski. No member of the Compensation Committee was at any time during the fiscal year ended December 31, 2004, or formerly, an officer or employee of Aspect or any subsidiary of Aspect. No member of the Compensation Committee had any relationship with us during the fiscal year ended December 31, 2004 requiring disclosure under Item 404 of Regulation S-K under the Securities Exchange Act of 1934.

None of our executive officers has served as a director or member of the compensation committee (or other committee serving an equivalent function) of any other entity, one of whose executive officers served as a director of or member of the Compensation Committee.

Comparative Stock Performance Graph

The comparative stock performance graph below compares the cumulative total stockholder return (assuming reinvestment of dividends, if any) from investing \$100 on January 28, 2000, the date on which our common stock was first publicly traded, and plotted at the end of the last trading day of the fiscal years ended December 31, 2000, 2001, 2002, 2003 and 2004, in each of (i) our common stock, (ii) the Nasdaq National Market Index of U.S. Companies and (iii) the Nasdaq Medical Devices, Instruments and Supplies, Manufacturers Index, which we refer to as the Nasdaq Medical Devices Index.



● Aspect Medical Systems, Inc. ■ Nasdaq National Market Index ▲ Nasdaq Medical Devices Index

Measurement Period (Fiscal Year Covered)	Aspect Medical Systems, Inc.	NASDAQ National Market Index	NASDAQ Medical Devices Index
1/28/00	\$100.00	\$100.00	\$100.00
12/29/00	\$ 30.53	\$ 63.41	\$102.99
12/31/01	\$ 35.40	\$ 50.30	\$112.46
12/31/02	\$ 12.00	\$ 34.78	\$ 91.93
12/31/03	\$ 40.47	\$ 52.00	\$134.35
12/31/04	\$ 86.58	\$ 56.59	\$156.98

PROPOSAL TWO — APPROVAL OF THE AMENDED AND RESTATED 1998 DIRECTOR EQUITY INCENTIVE PLAN

General

In the opinion of our board of directors, our future success depends, in large part, on our ability to maintain a competitive position in attracting, retaining and motivating non-employee directors with experience and ability by providing these directors with equity ownership opportunities and thereby better aligning the interests of these directors with those of our stockholders. Under our 1998 Director Stock Option Plan, we are currently authorized to grant options to purchase up to an aggregate of 200,000 shares of our common stock to our non-employee directors. As of April 8, 2005, there were 70,002 shares available for future grant under our 1998 Director Stock Option Plan and five non-employee directors were eligible to receive equity awards under the 1998 Director Stock Option Plan.

On April 21, 2005, our board of directors approved the Amended and Restated 1998 Director Equity Incentive Plan, which we refer to as the 1998 Director Plan, which amends, restates, renames and supersedes our 1998 Director Stock Option Plan, and, among other things:

- increases from 200,000 to 350,000 the number of shares of our common stock available for issuance under the 1998 Director Plan (subject to adjustment for certain changes in our capitalization),
- permits restricted stock awards and other stock-based awards to be granted pursuant to this plan, and
- eliminates the automatic award of a fixed number of options to purchase shares of our common stock upon initial election and subsequent re-election to our board of directors and, in lieu of such automatic awards, permits the board discretion in determining the timing, type of award and number of shares issuable pursuant to awards granted under this plan.

The effectiveness of the 1998 Director Plan is subject to the approval of our stockholders. If the 1998 Director Plan is not approved, the 1998 Director Stock Option Plan will remain in effect in its current form.

Summary of the 1998 Director Plan

The following summary of our 1998 Director Plan is qualified in its entirety by reference to the 1998 Director Plan, a copy of which is attached to this Proxy Statement as Appendix A, and may also be accessed from the SEC's home page (www.sec.gov). In addition, a copy of our 1998 Director Plan may be obtained upon written or oral request to Investor Relations Department, Aspect Medical Systems, Inc., 141 Needham Street, Newton, Massachusetts 02464, telephone: (617) 559-7000.

Description of Awards

Our 1998 Director Plan provides for the grant of non-statutory stock options, restricted stock awards and other stock-based awards, which are collectively referred to as "awards".

Non-statutory Stock Options. Our 1998 Director Plan provides for the grant of non-statutory stock options not entitled to special tax treatment under Section 422 of the Code. Optionees receive the right to purchase a specified number of shares of our common stock at a specified option price and subject to the other terms and conditions that are set forth in the stock option agreement evidencing the option grant. Options are granted at an exercise price that is equal to the fair market value per share of our common stock on the date of grant. The 1998 Director Plan permits our board of directors to determine the manner of payment of the exercise price of options, including through payment by cash, check, by delivery to us of a promissory note, by delivery to us of such other lawful consideration as the board may determine, or by any combination of these forms of payment.

Restricted Stock Awards. Restricted stock awards entitle recipients to acquire shares of our common stock, subject to our right to repurchase all or part of those shares from the recipient in the event that the conditions specified in the applicable award are not satisfied prior to the end of the applicable restriction period established for the award.

Other Stock-Based Awards. Under our 1998 Director Plan, the board of directors has the right to grant other awards based upon the common stock having such terms and conditions as the board of directors may determine.

Eligibility to Receive Awards

Our directors who are not our full-time employees or full-time employees of any of our subsidiaries, are eligible to receive awards under our 1998 Director Plan.

Plan Benefits

As of April 1, 2005, our five non-employee directors were eligible to receive awards under our 1998 Director Plan. The granting of awards under our 1998 Director Plan is discretionary, and we cannot now

determine the number or type of awards that may be granted in the future to a particular director. During the fiscal year ended December 31, 2004, we granted to our non-employee directors options pursuant to our 1998 Director Stock Option Plan to purchase an aggregate of 30,000 shares of our common stock at a weighted-average exercise price of \$17.98 per share. On April 19, 2005, the last reported sale price of our common stock on the Nasdaq National Market was \$23.59.

Administration

Our 1998 Director Plan is administered by our board of directors. Our board of directors has the authority to adopt, amend and repeal the administrative rules, guidelines and practices relating to our 1998 Director Plan and to interpret the provisions of our 1998 Director Plan. Subject to any applicable limitations contained in our 1998 Director Plan, our board of directors determines:

- the number of shares of our common stock covered by options and the dates upon which these options become exercisable,
- the duration of options, and
- the number of shares of our common stock subject to any restricted stock award or other stock based award and the terms and conditions of those awards, including conditions for repurchase, issue price and repurchase price.

Our board of directors is required to make appropriate adjustments to the number and class of securities available under our 1998 Director Plan, the number and class of securities and exercise price of outstanding options, the purchase price per share subject to outstanding restricted awards and the per share related provisions of any other stock based award to reflect stock splits, stock dividends, recapitalizations, spin-offs and other similar changes in capitalization.

If any award expires or is terminated, surrendered, canceled or forfeited, the unused shares of common stock covered by that award will again be available for grant under our 1998 Director Plan.

Acquisition Events and Change in Control Events

In the event of a merger or other acquisition event, as defined in the 1998 Director Plan, the board of directors is authorized to provide for outstanding options to be assumed or substituted for, if such options are not assumed or substituted for, to accelerate the awards to make them fully exercisable upon consummation of the acquisition event, or to provide for a cash-out of any outstanding options. In addition, in such an acquisition event, our repurchase and other rights under each outstanding restricted stock award shall inure to the benefit of our successor and shall apply to the cash, securities or other property into which our common stock is converted. Upon the occurrence of a change of control event, as defined in the 1998 Director Plan, all options then outstanding will automatically become immediately exercisable in full and the restrictions and conditions on all other awards then outstanding shall automatically be deemed terminated or satisfied. The board of directors may specify the effect of any acquisition event or change of control event with respect to any other award at the time such award is granted.

Amendment or Termination

Our board of directors may amend, suspend or terminate our 1998 Director Plan or any portion thereof at any time, provided that no amendment shall be made without stockholder approval if such approval is necessary to comply with any applicable tax or regulatory requirements. Amendments requiring stockholder approval will become effective when adopted by our board of directors.

Federal Income Tax Consequence

The following is a summary of the United States federal income tax consequences that generally will arise with respect to awards granted under our 1998 Director Plan. This summary is based on the federal tax laws in effect as of the date of this Proxy Statement. In addition, this summary assumes that all awards are exempt from, or comply with, the rules under Section 409A of the Code regarding nonqualified deferred compensa-

tion. Subject to stockholder approval of the 1998 Director Plan, no award will provide for deferral of compensation that does not comply with Section 409A of the Code, unless the board, at the time of grant, specifically provides that the award is not intended to comply with Section 409A. Changes to these laws could alter the tax consequences described below.

Non-statutory Stock Options. A participant will not have income upon the grant of a non-statutory stock option. A participant will have compensation income upon the exercise of a non-statutory stock option equal to the value of the stock on the day the participant exercised the option less the exercise price. Upon sale of the stock, the participant will have capital gain or loss equal to the difference between the sales proceeds and the value of the stock on the day the option was exercised. This capital gain or loss will be long-term if the participant has held the stock for more than one year and otherwise will be short-term.

Restricted Stock Awards. A participant will not have income upon the grant of restricted stock unless an election under Section 83(b) of the Code is made within 30 days of the date of grant. If a timely 83(b) election is made, then a participant will have compensation income equal to the value of the stock less the purchase price. When the stock is sold, the participant will have capital gain or loss equal to the difference between the sales proceeds and the value of the stock on the date of grant. If the participant does not make an 83(b) election, then when the stock vests the participant will have compensation income equal to the value of the stock on the vesting date less the purchase price. When the stock is sold, the participant will have capital gain or loss equal to the sales proceeds less the value of the stock on the vesting date. Any capital gain or loss will be long-term if the participant held the stock for more than one year and otherwise will be short-term.

Other Stock-Based Awards. The tax consequences associated with any other stock-based award granted under our 1998 Director Plan will vary depending on the specific terms of such award. Among the relevant factors are whether or not the award has a readily ascertainable fair market value, whether or not the award is subject to forfeiture provisions or restrictions on transfer, the nature of the property to be received by the participant under the award and the participant's holding period and tax basis for the award or underlying common stock.

Tax Consequences to Us. There will be no tax consequences to us except that we will be entitled to a deduction when a participant has compensation income.

Recommendation of the Board of Directors

The board of directors unanimously recommends that the stockholders vote FOR the approval of the Amended and Restated 1998 Director Equity Incentive Plan.

PROPOSAL THREE — APPROVAL OF AMENDMENT TO THE 2001 STOCK INCENTIVE PLAN

Overview

In the opinion of our board of directors, the future success of Aspect depends, in large part, on its ability to maintain a competitive position in attracting, retaining and motivating key employees with experience and ability. Under our 2001 Stock Incentive Plan, we are currently authorized to grant options to purchase up to an aggregate of 4,000,000 shares of our common stock to our officers, directors, employees, consultants and advisors. As of April 8, 2005, there were 2,295,678 shares available for future grant under our 2001 Stock Incentive Plan.

On April 21, 2005, our board of directors adopted an amendment to our 2001 Stock Incentive Plan that revised the treatment of options and restricted stock awards upon an acquisition event or a change in control event of Aspect as described below under “— Acquisition Events and Change of Control Events.” In addition, the amendment provides that no award granted pursuant to the 2001 Stock Incentive Plan shall provide for deferral of compensation that does not comply with Section 409A of the Code, unless the Board provides otherwise. The effectiveness of the amendment to our 2001 Stock Incentive Plan is subject to the approval of our stockholders. If the amendment to our 2001 Stock Incentive Plan is not approved, the 2001 Stock Incentive Plan will remain in effect in its current form.

Summary of the 2001 Plan

The following summary of our 2001 Stock Incentive Plan is qualified in its entirety by reference to our 2001 Stock Incentive Plan, a copy of which is attached as Appendix B to this Proxy Statement, and may also be accessed from the SEC's home page (www.sec.gov). In addition, a copy of our 2001 Stock Incentive Plan may be obtained upon written or oral request to Investor Relations Department, Aspect Medical Systems, Inc., 141 Needham Street, Newton, Massachusetts 02464, telephone: (617) 559-7000.

Description of Awards

Our 2001 Stock Incentive Plan provides for the grant of incentive stock options intended to qualify under Section 422 of the Code, non-statutory stock options, restricted stock awards and other stock-based awards, which are collectively referred to as "awards."

Incentive Stock Options and Non-statutory Stock Options. Optionees receive the right to purchase a specified number of shares of our common stock at a specified option price and subject to the other terms and conditions that are specified in connection with the option grant. Options may be granted at an exercise price that may be less than, equal to or greater than the fair market value of our common stock on the date of grant. Under present law, however, incentive stock options and options intended to qualify as performance-based compensation under Section 162(m) of the Code may not be granted at an exercise price less than the fair market value of our common stock on the date of grant (or less than 110% of the fair market value in the case of incentive stock options granted to optionees holding more than 10% of the total combined voting power of Aspect or any future parent or subsidiary corporations). Our 2001 Stock Incentive Plan permits our board of directors to determine the manner of payment of the exercise price of options, including through payment by cash, check or in connection with a "cashless exercise" through a broker, by surrender to us of shares of our common stock, by delivery to us of a promissory note, or by any combination of these forms of payment.

Restricted Stock Awards. Restricted stock awards entitle recipients to acquire shares of our common stock, subject to our right to repurchase all or part of those shares from the recipient in the event that the conditions specified in the applicable award are not satisfied prior to the end of the applicable restriction period established for that award.

Eligibility to Receive Awards

Employees, officers, directors, consultants and advisors of Aspect and our subsidiaries (and any individuals who have accepted an offer of employment with us), are eligible to be granted awards under our 2001 Stock Incentive Plan. Under present law, however, incentive stock options may only be granted to employees of Aspect or our subsidiary corporations. The maximum number of shares with respect to which an award may be granted to any participant under the plan may not exceed 250,000 shares per calendar year.

Plan Benefits

As of April 1, 2005, approximately 231 persons were eligible to receive awards under our 2001 Stock Incentive Plan, including our eleven executive officers and five non-employee directors. The granting of awards under our 2001 Stock Incentive Plan is discretionary, and we cannot now determine the number or type of awards granted in the future to a particular person or group of persons. During the fiscal year ended December 31, 2004, pursuant to our 2001 Stock Incentive Plan, we granted stock options to:

- our current non-employee directors to purchase 10,000 shares of common stock at an exercise price of \$23.62,
- our named executive officers to purchase the number of shares set forth following such named executive officer's name: Mr. Armstrong: 27,500; Mr. Bollen: 30,000; Mr. Chamoun: 100,000; Mr. Floyd: 30,000 and Dr. Kelley: 30,000, the weighted average exercise price of these options is \$15.66 per share,

- executive officers to purchase an aggregate of 273,500 shares of common stock at a weighted average exercise price of \$15.32 per share, and
- all employees, including all current officers who are not executive officers, to purchase an aggregate of 500,750 shares of common stock at a weighted average exercise price of \$15.65 per share.

All grants to our executive officers were made under our 2001 Stock Incentive Plan. The exercise prices for all of these option grants were equal to the fair market value of our common stock on the respective grant dates.

On April 19, 2005, the closing price of our common stock on the Nasdaq National Market was \$23.59.

Administration

Our 2001 Stock Incentive Plan is administered by our board of directors. Our board of directors has the authority to adopt, amend and repeal the administrative rules, guidelines and practices relating to our 2001 Stock Incentive Plan and to interpret the provisions of our 2001 Stock Incentive Plan. Pursuant to the terms of our 2001 Stock Incentive Plan, our board of directors may delegate authority under the plan to one or more committees of our board of directors. Our board of directors has authorized our Compensation Committee to administer certain aspects of our 2001 Stock Incentive Plan, including the granting of options to executive officers. Subject to any applicable limitations contained in our 2001 Stock Incentive Plan, our board of directors, the Compensation Committee or any other committee to whom the board of directors delegates authority, as the case may be, selects the recipients of awards and determines:

- the number of shares of our common stock covered by options and the dates upon which these options become exercisable,
- the exercise price of options,
- the duration of options, and
- the number of shares of our common stock subject to any restricted stock award and the terms and conditions of those awards, including conditions for repurchase, issue price and repurchase price.

Our board of directors is required to make appropriate adjustments to the number and class of securities available under our 2001 Stock Incentive Plan, the number and class of and exercise price of outstanding options and the repurchase price per share subject to outstanding restricted stock awards to reflect stock splits, stock dividends, recapitalizations, spin-offs and other similar changes in capitalization.

If any award expires or is terminated, surrendered, canceled or forfeited, the unused shares of common stock covered by that award will again be available for grant under our 2001 Stock Incentive Plan subject, however, in the case of incentive stock options, to any limitations under the Code.

Acquisition Events and Change in Control Events

Pursuant to the proposed amendment our 2001 Stock Incentive Plan, in the event of a merger or other acquisition event, as defined in the 2001 Stock Incentive Plan, the board of directors is authorized to provide for outstanding options to be assumed or substituted for, to accelerate the awards to make them fully exercisable prior to consummation of the acquisition event, if such options are not assumed or substituted for, or to provide for a cash-out of any outstanding options. In addition, in such a acquisition event, our repurchase and other rights under each outstanding restricted stock award shall inure to the benefit of our successor and shall apply to the cash, securities or other property into which our common stock is converted.

Upon the occurrence of a change of control event, as defined in the 2001 Stock Incentive Plan,

- options held by our chief executive officer shall fully accelerate and become exercisable 12 months following the occurrence of the change of control event, and the shares held by our chief executive officer pursuant to restricted stock awards shall fully accelerate and become free and clear of all

conditions and restrictions on the date which is 12 months following the occurrence of the change in control event,

- options held by our executive officers (other than our chief executive officer), which we refer to as senior management, fully accelerate and become exercisable 15 months following the occurrence of the change in control event, and the shares held by our senior management pursuant to restricted stock awards shall fully accelerate and become free and clear of all conditions and restrictions on the date which is 15 months following the occurrence of the change in control event, and
- options held by our employees shall accelerate by one year upon the occurrence of the change of control event and the shares held by our employees pursuant to restricted stock awards shall accelerate and become free and clear of all conditions and restrictions by one year upon the occurrence of the change in control event.

Notwithstanding the foregoing, if, on or prior to the one year anniversary of a change of control event, the chief executive officer's or any non-senior management employee's employment with us or our succeeding corporation is terminated by such participant for "good reason", as defined in the 2001 Stock Incentive Plan, or is terminated by us without "cause", as defined in the 2001 Stock Incentive Plan, all options held by such participant shall become immediately exercisable and the shares held by such participant with respect to restricted stock awards shall become free from all conditions and restrictions. If on or prior to the fifteen month anniversary of an acquisition event, any senior management employee's employment with us or our succeeding corporation is terminated by such participant for "good reason" or is terminated by us without "cause", all options held by such participant shall become immediately exercisable and the shares held by such participant with respect to restricted stock awards shall become free from all conditions and restrictions.

Amendment or Termination

No award may be made under our 2001 Stock Incentive Plan after March 18, 2011, but awards previously granted may extend beyond that date. Our board of directors may at any time amend, suspend or terminate our 2001 Stock Incentive Plan, except that no award designated as subject to Section 162(m) of the Code by our board of directors after the date of that amendment will become exercisable, realizable or vested (to the extent that amendment was required to grant that award) unless and until that amendment is approved by our stockholders.

Federal Income Tax Consequences

The following summarizes the United States federal income tax consequences that generally will arise with respect to awards granted under our 2001 Stock Incentive Plan. This summary is based on the tax laws in effect as of the date of this Proxy Statement. In addition, this summary assumes that all awards are exempt from, or comply with, the rules under Section 409A of the Code regarding nonqualified deferred compensation. Subject to stockholder approval of the amendment to the 2001 Stock Incentive Plan, no award will provide for deferral of compensation that does not comply with Section 409A of the Code, unless the board, at the time of grant, specifically provides that the award is not intended to comply with Section 409A. Changes to these laws could alter the tax consequences described below.

Incentive Stock Options. A participant will not have income upon the grant of an incentive stock option. Also, except as described below, a participant will not have income upon exercise of an incentive stock option if the participant has been employed by Aspect or 50% or more-owned corporate subsidiary at all times beginning with the option grant date and ending three months before the date the participant exercises the option. If the participant has not been so employed during that time, then the participant will be taxed as described below under "Non-statutory Stock Options." The exercise of an incentive stock option may subject the participant to the alternative minimum tax.

A participant will have income upon the sale of the stock acquired under an incentive stock option at a profit (if sales proceeds exceed the exercise price). The type of income will depend on when the participant

sells the stock. If a participant sells the stock more than two years after the option was granted and more than one year after the option was exercised, then all of the profit will be long-term capital gain. If a participant sells the stock prior to satisfying these waiting periods, then the participant will have engaged in a disqualifying disposition and a portion of the profit will be ordinary income and a portion may be capital gain. This capital gain will be long-term if the participant has held the stock for more than one year and otherwise will be short-term. If a participant sells the stock at a loss (sales proceeds are less than the exercise price), then the loss will be a capital loss. This capital loss will be long-term if the participant held the stock for more than one year and otherwise will be short-term.

Non-statutory Stock Options. A participant will not have income upon the grant of a non-statutory stock option. A participant will have compensation income upon the exercise of a non-statutory stock option equal to the value of the stock on the day the participant exercised the option less the exercise price. Upon sale of the stock, the participant will have capital gain or loss equal to the difference between the sales proceeds and the value of the stock on the day the option was exercised. This capital gain or loss will be long-term if the participant has held the stock for more than one year and otherwise will be short-term.

Restricted Stock. A participant will not have income upon the grant of restricted stock unless an election under Section 83(b) of the Code is made within 30 days of the date of grant. If a timely 83(b) election is made, then a participant will have compensation income equal to the value of the stock less the purchase price. When the stock is sold, the participant will have capital gain or loss equal to the difference between the sales proceeds and the value of the stock on the date of grant. If the participant does not make an 83(b) election, then when the stock vests the participant will have compensation income equal to the value of the stock on the vesting date less the purchase price. When the stock is sold, the participant will have capital gain or loss equal to the sales proceeds less the value of the stock on the vesting date. Any capital gain or loss will be long-term if the participant held the stock for more than one year and otherwise will be short-term.

Tax Consequences to Us. There will be no tax consequences to us except that we will be entitled to a deduction when a participant has compensation income. Any such deduction will be subject to the limitations of Section 162(m) of the Code.

Recommendation of the Board of Directors

The board of directors unanimously recommends that the stockholders vote FOR the approval of the amendment to our 2001 Stock Incentive Plan.

PROPOSAL FOUR — RATIFICATION OF SELECTION OF REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of our board of directors has selected the firm of Ernst & Young LLP as registered public accounting firm for the fiscal year ending December 31, 2005. Although stockholder approval of the Audit Committee's selection of Ernst & Young LLP is not required by law, our board of directors believes that it is advisable to give stockholders an opportunity to ratify this selection. If this proposal is not approved at the annual meeting, our Audit Committee will reconsider its selection of Ernst & Young LLP. Representatives of Ernst & Young LLP are expected to be present at the annual meeting and will have the opportunity to make a statement, if they desire to do so, and will be available to respond to appropriate questions from our stockholders.

Recommendation of the Board of Directors

The board of directors unanimously recommends that the stockholders vote FOR the ratification of the selection of Ernst & Young LLP as Aspect's registered public accounting firm for the fiscal year ending December 31, 2005.

OTHER MATTERS

Our board of directors does not know of any other matters which may come before the annual meeting. However, if any other matters are properly presented to the meeting, it is the intention of the persons named in the accompanying proxy card to vote, or otherwise act, in accordance with their judgment on those matters.

SOLICITATION OF PROXIES

The cost of solicitation of proxies will be borne by Aspect. In addition to the solicitation of proxies by mail, officers and employees of Aspect may solicit proxies in person or by telephone. We may reimburse brokers or persons holding stock in their names, or in the names of their nominees, for their expenses in sending proxies and proxy material to beneficial owners.

REVOCATION OF PROXY

Subject to the terms and conditions set forth in this proxy statement, all proxies received by us will be effective, notwithstanding any transfer of the shares to which those proxies relate, unless prior to the closing of the polls at the annual meeting, our Secretary receives a written notice of revocation signed by the person who, as of the record date, was the registered holder of those shares, our Secretary receives a duly executed proxy card bearing a later date than the proxy being revoked at any time before that proxy is voted or the registered holder appears at the meeting and votes in person.

STOCKHOLDER PROPOSALS

In order to be included in the proxy materials for our 2006 Annual Meeting of Stockholders, stockholders' proposed resolutions must be received by us at our principal executive offices, 141 Needham Street, Newton, Massachusetts 02464 no later than December 24, 2005. We suggest that proponents submit their proposals by certified mail, return receipt requested, addressed to our Secretary.

If a stockholder wishes to present a proposal at our 2006 Annual Meeting of Stockholders, but does not wish to have the proposal considered for inclusion in the Proxy Statement and proxy card, the stockholder must also give written notice to our Secretary at the address noted above. The required notice must be given within a prescribed time frame, which is generally calculated by reference to the date of our most recent annual meeting. Assuming that our 2006 Annual Meeting of Stockholders is held on or after May 5, 2006 and on or before August 3, 2006 (as we currently anticipate), our By-laws would require notice to be provided to our Secretary at our principal executive offices no earlier than February 24, 2006 and no later than March 16, 2006. If a stockholder fails to provide timely notice of a proposal to be presented at the 2006 Annual Meeting

of Stockholders, the proxies designated by our board of directors will have discretionary authority to vote on that proposal.

By Order of the Board of Directors,

MICHAEL FALVEY
Secretary

Newton, Massachusetts
April 26, 2005

OUR BOARD OF DIRECTORS HOPES THAT STOCKHOLDERS WILL ATTEND THE ANNUAL MEETING. WHETHER OR NOT YOU PLAN TO ATTEND, YOU ARE URGED TO COMPLETE, DATE, SIGN, AND RETURN THE ENCLOSED PROXY CARD IN THE ACCOMPANYING ENVELOPE. A PROMPT RESPONSE WILL GREATLY FACILITATE ARRANGEMENTS FOR THE MEETING AND YOUR COOPERATION WILL BE APPRECIATED. STOCKHOLDERS WHO ATTEND THE ANNUAL MEETING MAY VOTE THEIR STOCK PERSONALLY EVEN THOUGH THEY HAVE SENT IN THEIR PROXY CARDS.

ASPECT MEDICAL SYSTEMS, INC.
AMENDED AND RESTATED 1998 DIRECTOR
EQUITY INCENTIVE PLAN

1. Purpose.

The purpose of this Amended and Restated 1998 Director Equity Incentive Plan (the "Plan") of Aspect Medical Systems, Inc. (the "Company") is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate outside directors of the Company by providing such directors with equity ownership opportunities and thereby better aligning the interests of such directors with those of the Company's stockholders.

2. Administration.

The Plan will be administered by the Company's Board of Directors (the "Board"). The Board shall have authority to grant Awards (as defined in Section 3) and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Board may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award in the manner and to the extent it shall deem expedient to carry the Plan into effect and it shall be the sole and final judge of such expediency. All decisions by the Board shall be made in the Board's sole discretion and shall be final and binding on all persons having or claiming any interest in the Plan or in any Award. No director or person acting pursuant to the authority delegated by the Board shall be liable for any action or determination relating to or under the Plan made in good faith.

3. Participation in the Plan.

Directors of the Company who are not full-time employees of the Company or any subsidiary of the Company ("outside directors") shall be eligible to receive options, restricted stock awards and other stock unit awards (each an "Award") under the Plan. Each person who receives an Award under the Plan is deemed a "Participant".

4. Stock Subject to the Plan.

(a) The maximum number of shares of the Company's Common Stock, par value \$.01 per share ("Common Stock"), which may be issued under the Plan shall be 350,000 shares, subject to adjustment as provided in Section 9. If any Award expires or is terminated, surrendered or canceled without having been fully exercised or is forfeited in whole or in part (including as the result of shares of Common Stock subject to such Award being repurchased by the Company at the original issuance price pursuant to a contractual repurchase right) or results in any Common Stock not being issued, the unused Common Stock covered by such Award shall again be available for the grant of Awards under the Plan. Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares.

(b) All options (as defined in Section 5) granted under the Plan shall be non-statutory options not entitled to special tax treatment under Section 422 of the Internal Revenue Code of 1986, as amended (the "Code").

5. Terms, Conditions and Form of Options.

The Board may grant Options to purchase Common Stock (each, an "Option") and determine the number of shares of Common Stock to be covered by each Option and the conditions and limitations applicable to the exercise of each Option, including conditions relating to applicable federal or state securities laws, as it considers necessary or advisable. Each Option granted under the Plan shall be evidenced by a

written agreement in such form as the Board shall from time to time approve, which agreements may contain terms and conditions in addition to but not inconsistent with those set forth in the Plan.

(a) *Option Exercise Price.* The Option exercise price per share of Common Stock for each Option granted under the Plan shall equal (i) the last reported sales price per share of Common Stock on the Nasdaq National Market (or, if the Company is traded on a nationally recognized securities exchange on the date of grant, the reported closing sales price per share of Common Stock by such exchange) on the date of grant (or if no such price is reported on such date such price as reported on the nearest preceding day) or (ii) if the Common Stock is not traded on the Nasdaq National Market or such an exchange, the fair market value per share of Common Stock on the date of grant as determined by the Board (the "Fair Market Value").

(b) *Board Action.* The Board may at any time provide that any Options granted under the Plan become immediately exercisable in full or in part.

(c) *Termination.* Each Option shall terminate, and may no longer be exercised, on the earlier of the date (i) 10 years after the date such Option was granted or (ii) 60 days after the Participant ceases to serve as a director of the Company; provided that, in the event a Participant ceases to serve as a director due to his or her death or disability (within the meaning of Section 22(e) (3) of the Code or any successor provision), then the exercisable portion of the Option may be exercised within the period of 180 days following the date the Participant ceases to serve as a director (but in no event later than 10 years after the date such Option was granted) by the Participant or by the person to whom the Option is transferred by will, by the laws of descent and distribution, or by written notice pursuant to Section 5(e).

(d) *Exercise Procedure.* An Option may be exercised only by written notice to the Company at its principal office accompanied by payment of the full consideration for the shares as to which the Option is exercised. Such payment may be made as follows:

- (i) in cash or by check, payable to the order of the Company;
- (ii) by delivery of a promissory note of the Participant to the Company on terms determined by the Board;
- (iii) by payment of such other lawful consideration as the Board may determine; or
- (iv) any combination of the above permitted forms of payment.

(e) *Exercise by Representative Following Death of Director.* A Participant, by written notice to the Company, may designate one or more persons (and from time to time change such designation), including his or her legal representative, who, by reason of the Participant's death, shall acquire the right to exercise all or a portion of the Option. If the person or persons so designated wish to exercise any portion of the Option, they must do so within the term of the Option as provided herein. Any exercise by a representative shall be subject to the provisions of the Plan.

6. Restricted Stock.

(a) *General.* The Board may grant Awards entitling eligible outside directors to acquire shares of Common Stock ("Restricted Stock"), subject to the right of the Company to repurchase all or part of such shares at their issue price or other stated or formula price from the Participant in the event that conditions specified by the Board in the applicable Award are not satisfied prior to the end of the applicable restriction period or periods established by the Board for such Award.

(b) *Terms and Conditions.* The Board shall determine the terms and conditions of a Restricted Stock Award, including the conditions for repurchase (or forfeiture) and the issue price.

(c) *Stock Certificates.* Any stock certificates issued in respect of a Restricted Stock Award shall be registered in the name of the Participant and, unless otherwise determined by the Board, deposited by the Participant, together with a stock power endorsed in blank, with the Company (or its designee). At the expiration of the applicable restriction periods, the Company (or such designee) shall deliver the certificates no longer subject to such restrictions to the Participant or if the Participant has died, to the beneficiary

designated, in a manner determined by the Board, by a Participant to receive amounts due or exercise rights of the Participant in the event of the Participant's death (the "Designated Beneficiary"). In the absence of an effective designation by a Participant, "Designated Beneficiary" shall mean the Participant's estate.

7. Other Stock-Based Awards.

Other Awards of shares of Common Stock, and other Awards that are valued in whole or in part by reference to, or are otherwise based on, shares of Common Stock or other property, may be granted hereunder to Participants ("Other Stock Unit Awards"), including without limitation Awards entitling recipients to receive shares of Common Stock to be delivered in the future. Such Other Stock Unit Awards shall also be available as a form of payment in the settlement of other Awards granted under the Plan or as payment in lieu of compensation to which a Participant is otherwise entitled. Other Stock Unit Awards may be paid in shares of Common Stock or cash, as the Board shall determine. Subject to the provisions of the Plan, the Board shall determine the conditions of each Other Stock Unit Awards, including any purchase price applicable thereto.

8. Limitation of Rights.

(a) *No Right to Continue as a Director.* Neither the Plan, nor the granting of an Award nor any other action taken pursuant to the Plan, shall constitute or be evidence of any agreement or understanding, express or implied, that the Company will retain the Participant as a director for any period of time.

(b) *No Stockholder Rights for Awards.* No Participant nor a Designated Beneficiary thereof shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed with respect to an Award until becoming the record holder of such shares.

9. Adjustment to Common Stock.

(a) In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any distribution to holders of Common Stock other than an ordinary cash dividend, (i) the number and class of securities available under this Plan, (ii) the number and class of securities and exercise price per share of each outstanding Option, (iii) the repurchase price per share subject to each outstanding Restricted Stock Award and (vi) the share- and per-share-related provisions of each outstanding Other Stock Unit Award, shall be appropriately adjusted by the Company (or substituted Awards may be made, if applicable) to the extent determined by the Board.

(b) In the event of a proposed liquidation or dissolution of the Company, the Board shall upon written notice to the Participants provide that all then unexercised Options will (i) become exercisable in full as of a specified time at least 10 business days prior to the effective date of such liquidation or dissolution and (ii) terminate effective upon such liquidation or dissolution, except to the extent exercised before such effective date. The Board may specify the effect of a liquidation or dissolution on any Restricted Stock Award or Other Stock Unit Awards granted under the Plan at the time of grant.

10. Modification, Extension and Renewal of Awards.

The Board shall have the power to modify or amend outstanding Awards; provided, however, that no modification or amendment may (i) have the effect of altering or impairing any rights or obligations of any Award previously granted without the consent of the Participant, or (ii) modify the number of shares of Common Stock subject to the Award (except as provided in Section 9).

11. Acquisition and Change in Control Events

(a) Definitions

(i) A "Acquisition Event" shall mean:

(A) any merger or consolidation of the Company with or into another entity as a result of which all of the Common Stock is converted into or exchanged for the right to receive cash, securities or other property or is cancelled; or

(B) any exchange of all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange transaction.

(ii) A "Change in Control Event" shall mean:

(A) the acquisition by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) (a "Person") of beneficial ownership of any capital stock of the Company if, after such acquisition, such Person beneficially owns (within the meaning of Rule 13d-3 promulgated under the Exchange Act) 30% or more of either (x) the then-outstanding shares of common stock of the Company (the "Outstanding Company Common Stock") or (y) the combined voting power of the then-outstanding securities of the Company entitled to vote generally in the election of directors (the "Outstanding Company Voting Securities"); provided, however, that for purposes of this subsection (A), the following acquisitions shall not constitute a Change in Control Event: (x) any acquisition directly from the Company (excluding an acquisition pursuant to the exercise, conversion or exchange of any security exercisable for, convertible into or exchangeable for common stock or voting securities of the Company, unless the Person exercising, converting or exchanging such security acquired such security directly from the Company or an underwriter or agent of the Company), (y) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company, or (z) any acquisition by any corporation pursuant to a Business Combination (as defined below) which complies with clauses (x) and (y) of subsection (C) of this definition; or

(B) such time as the Continuing Directors (as defined below) do not constitute a majority of the Board (or, if applicable, the Board of Directors of a successor corporation to the Company), where the term "Continuing Director" means at any date a member of the Board (x) who was a member of the Board on March 25, 2005 or (y) who was nominated or elected subsequent to such date by at least a majority of the directors who were Continuing Directors at the time of such nomination or election or whose election to the Board was recommended or endorsed by at least a majority of the directors who were Continuing Directors at the time of such nomination or election; provided, however, that there shall be excluded from this clause (y) any individual whose initial assumption of office occurred as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents, by or on behalf of a person other than the Board; or

(C) the consummation of a merger, consolidation, reorganization, recapitalization or share exchange involving the Company or a sale or other disposition of all or substantially all of the assets of the Company (a "Business Combination"), unless, immediately following such Business Combination, each of the following two conditions is satisfied: (x) all or substantially all of the individuals and entities who were the beneficial owners of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 50% of the then-outstanding shares of common stock and the combined voting power of the then-outstanding securities entitled to vote generally in the election of directors, respectively, of the resulting or acquiring corporation in such Business Combination (which shall include, without limitation, a corporation which as a result of such transaction owns the Company or substantially all of the Company's assets either directly or through one or more subsidiaries) (such resulting or acquiring corporation is referred to herein as the

“Acquiring Corporation”) in substantially the same proportions as their ownership of the Outstanding Company Common Stock and Outstanding Company Voting Securities, respectively, immediately prior to such Business Combination and (y) no Person (excluding any employee benefit plan (or related trust) maintained or sponsored by the Company or by the Acquiring Corporation) beneficially owns, directly or indirectly, 30% or more of the then-outstanding shares of common stock of the Acquiring Corporation, or of the combined voting power of the then-outstanding securities of such corporation entitled to vote generally in the election of directors (except to the extent that such ownership existed prior to the Business Combination).

(b) *Effect on Options*

(i) *Acquisition Event.* Upon the occurrence of a Acquisition Event (regardless of whether such event also constitutes a Change in Control Event), or the execution by the Company of any agreement with respect to an Acquisition Event (regardless of whether such event will result in a Change in Control Event), the Board shall provide that all outstanding Options shall be assumed, or equivalent options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof); provided that if such Acquisition Event also constitutes a Change in Control Event, except to the extent specifically provided to the contrary in the instrument evidencing any Option or any other agreement between a Participant and the Company, such assumed or substituted Options shall become immediately exercisable in full upon the Acquisition Event. In the event of an Acquisition Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for each share of Common Stock surrendered pursuant to such Acquisition Event (the “Acquisition Price”), then the Board may instead provide that all outstanding Options shall terminate upon consummation of such Acquisition Event and that each Participant shall receive, in exchange therefor, a cash payment equal to the amount (if any) by which (A) the Acquisition Price multiplied by the number of shares of Common Stock subject to such outstanding Options (whether or not then exercisable), exceeds (B) the aggregate exercise price of such Options.

For purposes hereof, an Option shall be considered to be assumed if, following consummation of the Acquisition Event, the Option confers the right to purchase, for each share of Common Stock subject to the Option immediately prior to the consummation of the Acquisition Event, the consideration (whether cash, securities or other property) received as a result of the Acquisition Event by holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Acquisition Event (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); provided, however, that if the consideration received as a result of the Acquisition Event is not solely common stock of the acquiring or succeeding corporation (or an affiliate thereof), the Company may, with the consent of the acquiring or succeeding corporation, provide for the consideration to be received upon the exercise of Options to consist solely of common stock of the acquiring or succeeding corporation (or an affiliate thereof) equivalent in value (as determined by the Board) to the per share consideration received by holders of outstanding shares of Common Stock as a result of the Acquisition Event.

Notwithstanding the foregoing, if the acquiring or succeeding corporation (or an affiliate thereof) does not agree to assume, or substitute for, such Options, then the Board shall, upon written notice to the Participants, provide that all then unexercised Options will become exercisable in full as of a specified time prior to the Acquisition Event and will terminate immediately prior to the consummation of such Acquisition Event, except to the extent exercised by the Participants before the consummation of such Acquisition Event.

(ii) *Change in Control Event that is not an Acquisition Event.* Upon the occurrence of a Change in Control Event that does not also constitute an Acquisition Event, except to the extent specifically provided to the contrary in the instrument evidencing any Option or any other agreement between a Participant and the Company, all Options then-outstanding shall automatically become immediately exercisable in full.

(c) Effect on Restricted Stock Awards

(i) Acquisition Event that is not a Change in Control Event. Upon the occurrence of an Acquisition Event that is not a Change in Control Event, the repurchase and other rights of the Company under each outstanding Restricted Stock Award shall inure to the benefit of the Company's successor and shall apply to the cash, securities or other property which the Common Stock was converted into or exchanged for pursuant to such Acquisition Event in the same manner and to the same extent as they applied to the Common Stock subject to such Restricted Stock Award.

(ii) Change in Control Event. Upon the occurrence of a Change in Control Event (regardless of whether such event also constitutes an Acquisition Event), except to the extent specifically provided to the contrary in the instrument evidencing any Restricted Stock Award or any other agreement between a Participant and the Company, all restrictions and conditions on all Restricted Stock Awards then-outstanding shall automatically be deemed terminated or satisfied.

(d) Effect on Other Stock Unit Awards. The Board may specify in an Award at the time of grant the effect of an Acquisition Event and Change in Control Event on any Other Stock Unit Award.

12. Amendment of the Plan.

The Board may amend, suspend or terminate the Plan or any portion thereof at any time, provided that no amendment shall be made without stockholder approval if such approval is necessary to comply with any applicable tax or regulatory requirements. Amendments requiring stockholder approval shall become effective when adopted by the Board.

13. Withholding.

Each Participant shall pay to the Company, or make provision satisfactory to the Company for payment of, any taxes required by law to be withheld in connection with an Award to such Participant. Except as the Board may otherwise provide in an Award, for so long as the Common Stock is registered under the Exchange Act, Participants may satisfy such tax obligations in whole or in part by delivery of shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their Fair Market Value; provided, however, except as otherwise provided by the Board, that the total tax withholding where stock is being used to satisfy such tax obligations cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state tax purposes, including payroll taxes, that are applicable to such supplemental taxable income). Shares surrendered to satisfy tax withholding requirements cannot be subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements. The Company may, to the extent permitted by law, deduct any such tax obligations from any payment of any kind otherwise due to a Participant.

14. Notice.

Any written notice to the Company required by any of the provisions of the Plan shall be addressed to the Treasurer of the Company and shall become effective when it is received.

15. Governing Law.

The provisions of the Plan, all determinations made and actions taken pursuant hereto and all Options Restricted Stock Awards and Other Stock Unit Awards made hereunder shall be governed by and interpreted in accordance with the laws of the State of Delaware, without regard to any applicable conflicts of law.

16. Compliance with Code Section 409A.

No Award shall provide for deferral of compensation that does not comply with Section 409A of the Code, unless the Board, at the time of grant, specifically provides that the Award is not intended to comply with Section 409A of the code.

17. Effective Date and Term of Plan.

The Plan shall become effective on the date of approval by the stockholders of the Company. No Awards shall be granted under the Plan after the completion of ten years from the earlier of (i) the date on which the Plan was adopted by the Board or (ii) the date the Plan was approved by the Company's stockholders, but Awards previously granted may extend beyond that date.

ASPECT MEDICAL SYSTEMS, INC.
AMENDMENT TO
2001 STOCK INCENTIVE PLAN

The 2001 Stock Incentive Plan (the "2001 Stock Plan") of Aspect Medical Systems, Inc. is hereby amended as follows:

1. Section 7(c) of the 2001 Stock Plan is deleted in its entirety and a new Section 7(c) is inserted as follows:

"(c) Acquisition and Change in Control Events

(1) Definitions

(a) An "Acquisition Event" shall mean:

(i) any merger or consolidation of the Company with or into another entity as a result of which all of the Common Stock of the Company is converted into or exchanged for the right to receive cash, securities or other property or is cancelled; or

(ii) any exchange of all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange transaction.

(b) A "Change in Control Event" shall mean:

(i) the acquisition by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) (a "Person") of beneficial ownership of any capital stock of the Company if, after such acquisition, such Person beneficially owns (within the meaning of Rule 13d-3 promulgated under the Exchange Act) 30% or more of either (x) the then-outstanding shares of common stock of the Company (the "Outstanding Company Common Stock") or (y) the combined voting power of the then-outstanding securities of the Company entitled to vote generally in the election of directors (the "Outstanding Company Voting Securities"); *provided, however*, that for purposes of this subsection (i), the following acquisitions shall not constitute a Change in Control Event: (A) any acquisition directly from the Company (excluding an acquisition pursuant to the exercise, conversion or exchange of any security exercisable for, convertible into or exchangeable for common stock or voting securities of the Company, unless the Person exercising, converting or exchanging such security acquired such security directly from the Company or an underwriter or agent of the Company), (B) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company, or (C) any acquisition by any corporation pursuant to a Business Combination (as defined below) which complies with clauses (x) and (y) of subsection (iii) of this definition; or

(ii) such time as the Continuing Directors (as defined below) do not constitute a majority of the Board (or, if applicable, the Board of Directors of a successor corporation to the Company), where the term "Continuing Director" means at any date a member of the Board (x) who was a member of the Board on March 25, 2005 or (y) who was nominated or elected subsequent to such date by at least a majority of the directors who were Continuing Directors at the time of such nomination or election or whose election to the Board was recommended or endorsed by at least a majority of the directors who were Continuing Directors at the time of such nomination or election; *provided, however*, that there shall be excluded from this clause (y) any individual whose initial assumption of office occurred as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or

threatened solicitation of proxies or consents, by or on behalf of a person other than the Board; or

(iii) the consummation of a merger, consolidation, reorganization, recapitalization or share exchange involving the Company or a sale or other disposition of all or substantially all of the assets of the Company (a "Business Combination"), unless, immediately following such Business Combination, each of the following two conditions is satisfied: (x) all or substantially all of the individuals and entities who were the beneficial owners of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 50% of the then-outstanding shares of common stock and the combined voting power of the then-outstanding securities entitled to vote generally in the election of directors, respectively, of the resulting or acquiring corporation in such Business Combination (which shall include, without limitation, a corporation which as a result of such transaction owns the Company or substantially all of the Company's assets either directly or through one or more subsidiaries) (such resulting or acquiring corporation is referred to herein as the "Acquiring Corporation") in substantially the same proportions as their ownership of the Outstanding Company Common Stock and Outstanding Company Voting Securities, respectively, immediately prior to such Business Combination and (y) no Person (excluding any employee benefit plan (or related trust) maintained or sponsored by the Company or by the Acquiring Corporation) beneficially owns, directly or indirectly, 30% or more of the then-outstanding shares of common stock of the Acquiring Corporation, or of the combined voting power of the then-outstanding securities of such corporation entitled to vote generally in the election of directors (except to the extent that such ownership existed prior to the Business Combination).

(c) "Good Reason" shall mean any reduction of 10% of more in the annual cash compensation payable to the Participant from and after such Change in Control (which in the case of sales personnel shall mean the average cash compensation paid to such Participant for the two calendar years immediately prior to such Change in Control), or the relocation of the place of business at which the Participant is principally located to a location that is greater than 50 miles from its location immediately prior to the Acquisition Event or Change in Control Event.

(d) "Cause" shall mean any (i) willful failure by the Participant, which failure is not cured within 30 days of written notice to the Participant from the Company, to perform his or her material responsibilities to the Company or (ii) willful misconduct by the Participant which affects the business reputation of the Company. The Participant shall be considered to have been discharged for "Cause" if the Company determines, within 30 days after the Participant's resignation, that discharge for Cause was warranted.

(e) "CEO" shall mean the Chief Executive Officer of the Company.

(f) "Senior Management Employees" shall mean the executive officers of the Company who report directly to the CEO or the Board of Directors of the Company.

(g) "Non-Management Employees" shall mean all of the employees of the Company other than the CEO and the Senior Management Employees.

(2) Effect on Options

(a) Acquisition Event. Upon the occurrence of an Acquisition Event (regardless of whether such event also constitutes a Change in Control Event), or the execution by the Company of any agreement with respect to an Acquisition Event (regardless of whether such event will result in a Change in Control Event), the Board shall provide that all outstanding Options shall be assumed, or equivalent options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof); *provided that* if such Acquisition Event also constitutes a Change in Control Event, except

to the extent specifically provided to the contrary in the instrument evidencing any Option or any other agreement between a Participant and the Company

then (1)

(i) in the case of the CEO, all of such assumed or substituted options shall become exercisable in full upon the date which is 12 full months after the date of the Acquisition Event;

(ii) in the case of the Senior Management Employees, all of such assumed or substituted options shall become exercisable in full upon the date which is 15 full months after the date of the Acquisition Event; and

(iii) in the case of Non-Management Employees, the vesting of all of such assumed or substituted options shall be accelerated by one year such that (x) all of such assumed or substituted options which would have been exercisable upon the date which is 12 full months after the date of the Acquisition Event shall be immediately exercisable in full upon such Acquisition Event and (y) the remaining shares shall, after such Acquisition Event, continue to become vested in accordance with the vesting schedule set forth in such option but after giving effect to the acceleration of all vesting by one year;

and (2)

such assumed or substituted options shall become immediately exercisable in full if, on or prior to (i) the first anniversary of the date of the consummation of the Acquisition Event, in the case of the CEO and Non-Management Employees and (ii) the end of 15 full months after the Acquisition Event, in the case of Senior Management Employees, the Participant's employment with the Company or the acquiring or succeeding corporation is terminated for Good Reason by the Participant or is terminated without Cause by the Company or the acquiring or succeeding corporation.

For purposes hereof, an Option shall be considered to be assumed if, following consummation of the Acquisition Event, the Option confers the right to purchase, for each share of Common Stock subject to the Option immediately prior to the consummation of the Acquisition Event, the consideration (whether cash, securities or other property) received as a result of the Acquisition Event by holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Acquisition Event (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); provided, however, that if the consideration received as a result of the Acquisition Event is not solely common stock of the acquiring or succeeding corporation (or an affiliate thereof), the Company may, with the consent of the acquiring or succeeding corporation, provide for the consideration to be received upon the exercise of Options to consist solely of common stock of the acquiring or succeeding corporation (or an affiliate thereof) equivalent in value (as determined by the Board) to the per share consideration received by holders of outstanding shares of Common Stock as a result of the Acquisition Event.

Notwithstanding the foregoing, if the acquiring or succeeding corporation (or an affiliate thereof) does not agree to assume, or substitute for, such Options, then the Board shall, upon written notice to the Participants, provide that all then unexercised Options will become exercisable in full as of a specified time prior to the Acquisition Event and will terminate immediately prior to the consummation of such Acquisition Event, except to the extent exercised by the Participants before the consummation of such Acquisition Event; provided, however, that in the event of an Acquisition Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for each share of Common Stock surrendered pursuant to such Acquisition Event (the "Acquisition Price"), then the Board may instead provide that all outstanding Options shall terminate upon consummation of such Acquisition Event and that each Participant shall receive, in exchange therefor, a cash payment equal to the amount (if any) by which (A) the Acquisition Price

multiplied by the number of shares of Common Stock subject to such outstanding Options (whether or not then exercisable), exceeds (B) the aggregate exercise price of such Options.

(b) *Change in Control Event that is not an Acquisition Event.* Upon the occurrence of a Change in Control Event that does not also constitute an Acquisition Event, except to the extent specifically provided to the contrary in the instrument evidencing any Option or any other agreement between a Participant and the Company,

then (1)

(i) in the case of the CEO, all of such options shall become exercisable in full upon the date which is 12 full months after the date of the Change in Control Event;

(ii) in the case of the Senior Management Employees, all of such options shall become exercisable in full upon the date which is 15 full months after the date of the Change in Control Event; and

(iii) in the case of Non-management Employees, the vesting of all of such options shall be accelerated by one year such that (x) all of such assumed or substituted options which would have been exercisable upon the date which is 12 full months after the date of the Change in Control Event shall be immediately exercisable in full upon such Change in Control Event and (y) the remaining shares shall, after such Change in Control Event, continue to become vested in accordance with the vesting schedule set forth in such option but after giving effect to the acceleration of all vesting by one year;

and (2)

such options shall be immediately exercisable in full if, on or prior to (i) the first anniversary of the date of the consummation of the Change in Control Event, in the case of the CEO and Non-Management Employees and (ii) the end of 15 full months after the Change in Control Event, in the case of Senior Management Employees, the Participant's employment with the Company or the acquiring or succeeding corporation is terminated for Good Reason by the Participant or is terminated without Cause by the Company or the acquiring or succeeding corporation.

(3) *Effect on Restricted Stock Awards*

(a) *Acquisition Event that is not a Change in Control Event.* Upon the occurrence of an Acquisition Event that is not a Change in Control Event, the repurchase and other rights of the Company under each outstanding Restricted Stock Award shall inure to the benefit of the Company's successor and shall apply to the cash, securities or other property which the Common Stock was converted into or exchanged for pursuant to such Acquisition Event in the same manner and to the same extent as they applied to the Common Stock subject to such Restricted Stock Award.

(b) *Change in Control Event.* Upon the occurrence of a Change in Control Event (regardless of whether such event also constitutes an Acquisition Event), except to the extent specifically provided to the contrary in the instrument evidencing any Restricted Stock Award or any other agreement between a Participant and the Company,

(1) in the case of the CEO, the vesting schedule of all Restricted Stock Awards shall be accelerated so that all of the shares subject to the Restricted Stock Award shall become free and clear of all conditions and restrictions upon the date which is 12 full months after the date of the Change in Control Event;

(2) in the case of Senior Management Employees, the vesting schedule of all Restricted Stock Awards shall be accelerated so that all of the shares subject to the Restricted Stock Award shall be free and clear of all conditions and restrictions upon the date which is 15 full months after the date of the Change in Control Event;

(3) in the case of Non-Management Employees, the vesting schedule of all Restricted Stock Awards shall be accelerated by one year such that (i) all the shares subject to the Restricted Stock Award which would have been free and clear of all conditions and restrictions upon the date which is 12 full months after the date of Change in Control Event shall be immediately free and clear of all conditions and restrictions on the date of such Change in Control Event and (ii) all of the remaining shares subject to the Restricted Stock Award shall, after such Change in Control Event, continue to become free and clear of all conditions and restrictions in accordance with the vesting schedule set forth in such Restricted Stock Award but after giving effect to the acceleration of all vesting by one year.

(4) In addition, each such Restricted Stock Award shall immediately become free from all conditions and restrictions if, (A) on or prior to the first anniversary of the date of the consummation of the Change in Control Event, in the case of the CEO and Non-Management Employees and (B) the end of 15 full months after the Change in Control Event, in the case of Senior Management Employees, the officer or employee's employment with the Company or the acquiring or succeeding corporation is terminated for Good Reason by the officer or employee or is terminated without Cause by the Company or the acquiring or succeeding corporation.

2. The following new Subsection, Subsection 9(f), is hereby inserted into the 2001 Stock Plan immediately following Subsection 9(e):

“(f) *Compliance with Code Section 409A.* No Award shall provide for deferral of compensation that does not comply with Section 409A of the Code, unless the Board, at the time of grant, specifically provides that the Award is not intended to comply with Section 409A of the Code.